

SPIROTETRAMAT **GROUP 23** **INSECTICIDE**

SEIKO

INSECTICIDE

For Agricultural Use Only: For control of listed insects on certain field, tree, tropical fruits, vine, and vegetable crops.


ACTIVE INGREDIENT:	WT. BY %
Spirotetramat: cis-3-(2,5-dimethylphenyl)-8-methoxy-2-oxo-1-azaspiro[4.5]dec-3-en-4-yl-ethyl carbonate	14.50%
OTHER INGREDIENTS:	85.50%
TOTAL:	100.00%
Contains 1.25 pounds spirotetramat per U.S. gallon (150 grams a.i./liter)	

**KEEP OUT OF REACH OF CHILDREN /
MANTÉNGASE FUERA DEL ALCANCE DE LOS NIÑOS
CAUTION / PRECAUCIÓN**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you **DO NOT** understand this label, find someone to explain it to you in detail.)

**See label booklet for complete First Aid, Precautionary Statements,
Directions For Use, and Storage and Disposal.**

Manufactured For:

Sharda USA LLC 

7217 Lancaster Pike, Suite A
Hockessin, Delaware 19707

EPA Reg. No. 83529-390

EPA Est. No. (AG) 72159-GA-001; (MC) 89332-GA-001; (SC) 39578-TX-001

The EPA Establishment Number is identified by the circled letters above that match the first two letters in the batch number.

FIRST AID	
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 - 20 minutes. • Call a poison control center or doctor for treatment advice.
IF SWALLOWED:	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • DO NOT induce vomiting unless told to do so by a poison control center or doctor. • DO NOT give anything by mouth to an unconscious person.
IF IN EYES:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
NOTE TO PHYSICIAN	
No specific antidote is available. Treat patient symptomatically.	
HOTLINE NUMBERS	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. For emergency information concerning this product, call your poison control center at 1-800-222-1222 . For general information about this product, contact the National Pesticides Information Center (NPIC) at 1-800-858-7378 , Monday through Friday, 8 AM to 12 PM PST, or at http://npic.orst.edu .	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS **CAUTION**

Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

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.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of barrier laminate, butyl rubber \geq 14 mils, nitrile rubber \geq 14 mils, polyvinyl chloride \geq 14 mils, or Viton \geq 14 mils
- Shoes plus socks

ENGINEERING CONTROLS

When handlers use closed systems, or enclosed cabs 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 thoroughly with soap and water after handling and 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.

ENVIRONMENTAL HAZARDS

For Terrestrial Use: This pesticide is toxic to aquatic invertebrates and oysters. **DO NOT** apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. This product may contaminate water through drift of spray in wind. **DO NOT** apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. **DO NOT** contaminate water when disposing of equipment washwaters or rinsate.

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

This product is potentially toxic to honey bee larvae through residues in pollen and nectar, but not to adult honeybees. Exposure of adult bees to direct treatment or residues on blooming crops can lead to effects on honeybee larvae. See the **DIRECTIONS FOR USE** section of this label for specific crop application instructions that minimize risk to honey bee larvae.

Run Off Management

This product may contaminate water through runoff or drift of spray in wind. This product has a high potential for runoff for several weeks after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. A level well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

Endangered Species Advisory/Protection Requirements

The use of any pesticide in a manner that may kill or otherwise harm endangered species or adversely modify their habitat is a violation of Federal law.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read the entire label before using this product.

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, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), notification to workers, 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 worker entry into treated areas during the restricted-entry interval (REI) of 24 hours.

PPE required for early entry to treated areas (that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water), is:

- Coveralls
- Chemical-resistant gloves made of barrier laminate, butyl rubber \geq 14 mils, nitrile rubber \geq 14 mils, polyethylene, polyvinyl chloride \geq 14 mils, or Viton \geq 14 mils
- Shoes plus socks

PRODUCT INFORMATION

SEIKO:

- Is a suspension concentrate formulation and is active primarily by ingestion against immature target pest life stages. In addition, fertility of adult female target pests, such as aphids and whiteflies, may be reduced.
- Can be applied by air, ground equipment or through chemigation as a preventative treatment or timed to coincide with an early threshold level in developing insect populations.
- Must be tank-mixed with a spray adjuvant/additive having spreading and penetrating properties to maximize leaf uptake and systemicity of the active ingredient within treated plants; please contact your local Sharda USA LLC representative for specific recommendations by crop. The tank-mixture of **SEIKO** with an adjuvant/additive having sticking properties or crop protection product formulations containing built-in stickers have been shown to interfere with leaf uptake and should be avoided.
- It is widely known that tank mixtures and/or sequential treatments of horticultural spray oil with Captan and/or sulfur may cause adverse plant compatibility in tree and vine crops; including **SEIKO** in this tankmix and/or sequential treatment scenario is not recommended.
- Following application to plant foliage, **SEIKO** is fully systemic, moving through phloem and xylem to all plant tissues including, new shoot, leaf, and root tissues; systemicity and efficacy may be hindered during periods of cold temperatures, under drought conditions, or when plants are not actively growing.

APPLICATION INSTRUCTIONS

Foliar applications must be made using properly calibrated ground sprayers, fixed- or rotary-winged aircraft or through properly designed, sprinkler-type, chemigation equipment (See **Chemigation Application** section). Sufficient spray volume, based on the size and density of the treated crop, must be utilized that allows for good coverage of both young and old foliage without runoff or collection of spray solution on leaf margins, fruit, or other plant tissues. For optimum control of target pests on tree and vine crops, treating both sides of the plant during the same application period is recommended; for practices such as alternate row middles or tops and bottoms, both sides of the trees or vines must be treated within a 72-hour period. Good coverage will help ensure maximum uptake by leaf surfaces and optimum systemicity within the plant.

- Ground applications must be made in a minimum of 50 gallons per acre on tree and vine crops; 15 gallons of water per acre on potato and vegetable crops; 10 gallons of water per acre on field crops.
- Aerial applications must be made in a minimum of 10 gallons of water per acre in tree and vine crops, and 5 gallons of water per acre in field, vegetable, and potato crops. The higher dosage of **SEIKO** within the crop/pest-specific section may be necessary for optimum control for aerial applications.

USE RESTRICTIONS

- **DO NOT** use in enclosed structures, such as greenhouses or planthouses.
- For annual crops where multiple plantings can occur within a calendar year, **DO NOT** apply more than 48 fl. oz./A, which is 0.47 lb. spirotetramat/A within a calendar year unless specified otherwise within a crop-specific section for a given crop.
- Sufficient leaf tissue must be present for uptake and translocation of this product; due to this requirement, **DO NOT** apply prior to petal-fall on pome fruits, stone fruits, and tree nut crops.
- The use of Induce® adjuvant in combination with **SEIKO** on grape, pome fruits, and stone fruits is prohibited when fruit is present due to adverse plant compatibility on harvested commodities.
- **DO NOT** apply when winds are greater than 15 mph and avoid gusty and windless conditions.

Refer to the specific use directions and restrictions in each Crop, Crop Group or Crop Subgroup table.

SPIROTETRAMAT	GROUP	23	INSECTICIDE
---------------	-------	----	-------------

INSECTICIDE RESISTANCE MANAGEMENT

For resistance management, **SEIKO** contains spirotetramat, a Group 23 insecticide. Any insect population may contain individuals naturally resistant to **SEIKO** and other Group 23 insecticides. The resistant individuals may dominate the insect population if this group of insecticides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay insecticide resistance, take the following steps:

- Rotate the use of **SEIKO** or other Group 23 insecticides within a growing year, or among growing years, with different groups that control the same pests.
- Use tank mixtures with insecticides from a different group that are equally effective on the target pest when such use is permitted. **DO NOT** rely on the same mixture repeatedly for the same pest population. Consider any known cross-resistance issues for the targeted pests between the individual components of a mixture.
- In addition, consider the following recommendations provided by the Insecticide Resistance Action Committee (IRAC):
 - Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
 - Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
 - When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).
 - Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
 - The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.
- Adopt an integrated pest management program for insecticide/acaricides use that includes scouting, uses historical information related to pesticide use, crop rotation, record keeping, and which considers cultural, biological, and other chemical control practices.
- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.
- Contact your local extension specialist, certified crop advisor, and/or Sharda USA LLC representative for additional resistance management or IPM recommendations. Also, for more information on Insect Resistance Management (IRM), visit the Insecticide Resistance Action Committee (IRAC) on the web at <http://irac-online.org>.

CHEMIGATION - VEGETABLE AND POTATO CROPS ONLY

Types of Irrigation Systems

Apply this product only through:

- Sprinkler type irrigation systems only.
- These types include: center pivot, lateral move, side roll, or overhead solid set irrigation systems.
- **DO NOT** apply **SEIKO** through any other type of irrigation system.
- **DO NOT** apply when wind speed favors drift beyond the area intended for treatment.

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 chemigation system must be calibrated to uniformly apply the rates specified in crop-specific label sections. If you have questions about calibration, contact your Cooperative Extension Service agent, 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.

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/engine stops or in cases where there is no water pump, when water pressure decreases to the point where pesticide distribution is adversely affected. 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 connect an irrigation system (including greenhouse system) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place. 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. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back-flow preventer (RPZ), or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. 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.

Injection for Chemigation

Inject the specified dosage of **SEIKO** into the irrigation main water stream: (1) through a constant flow, metering device; (2) into the center of the main line flow via a pitot tube or equivalent; (3) at a point ahead of at least one, right-angle turn in the main stream flow such that thorough mixing with the irrigation water is ensured.

Center-Pivot and Automatic-Move Linear Systems

Inject the specified dosage per acre continuously for one complete revolution (center pivot) or move of the system. The system should be run at maximum speed. 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. The use of **END GUNS** is **NOT RECOMMENDED**. End guns that provide uneven distribution of treated water can result in lack of effectiveness or illegal pesticide residues in or on the crop.

Solid Set and Manually Controlled Linear Systems

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

Chemigation Application Instructions

Chemigation applications must be made as concentrated as possible. For best results apply at 100% input/travel speed, for center pivots or 0.1 inch (2,716 gallons) up to 0.15 inch (4,073 gallons) of water/A, for other systems. The higher dosage of **SEIKO** within the crop-specific/pest section may be necessary for optimum control for chemigation applications.

Flushing and Cleaning the Chemical Injection System

At the end of the application period, allow time for all lines to flush the pesticide through all nozzles or emitters 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.

In order to apply pesticides accurately, the chemical injection system must be kept clean, free of 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.

SPRAY DRIFT MANAGEMENT ADVISORY

DO NOT apply when wind speed favors drift beyond the area intended for treatment. The interaction of many equipment and weather-related factors determine the potential for spray drift. The applicator is responsible for considering all of these factors when making application decisions. Avoiding spray drift is the responsibility of the applicator.

Droplet Size

An important factor influencing drift is droplet size. Select nozzles and pressure that deliver medium spray droplets as indicated in nozzle manufacturer's catalogs and in accordance with ASAE Standard S-572. Nozzles that deliver coarse spray droplets may be used to reduce spray drift provided spray volume per acre (GPA) is increased to maintain crop coverage. For aerial application, spray should be released at the lowest possible height consistent with good pest control and flight safety. Applications more than 10 feet above the crop canopy should be avoided. Low humidity and high temperature increase the evaporation rate of spray droplets and therefore the likelihood of spray drift to aquatic areas. Avoid spraying during conditions of low humidity and/or high temperature.

Wind Speed

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size, canopy and equipment specifications determine drift potential at any given wind speed. **DO NOT** apply when winds are greater than 15 mph and avoid gusty and windless conditions. Avoiding applications when wind direction is toward an aquatic area can reduce risk exposure to sensitive aquatic areas.

Temperature Inversions:

DO NOT make aerial or ground applications during temperature inversions. Drift potential is high during temperature inversions.

Temperature inversions restrict vertical air mixing, which causes small-suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog. However, if fog is not present, the movement of smoke from a ground source can also identify inversions. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Airblast (Air Assist) Applications for Tree Crops and Vineyards:

Airblast sprayers carry droplets into the canopy of trees/vines via a radial, or lateral directed air stream. The following drift management practices should be followed:

- Adjust deflectors and aiming devices so that spray is only directed into the canopy;
- Block off upward pointed nozzles when there is no overhanging canopy;
- Use enough air volume to penetrate the canopy and provide good coverage;
- **DO NOT** allow the spray to go beyond the edge of the cultivated area (i.e., turn off sprayer when turning at end rows);
- For applications to the outside rows, only spray inward, toward the orchard/grove.

Aerial Applications:

- Mount the spray boom on the aircraft so as to minimize drift caused by wing tip vortices.
- The minimum practical boom length should be used, and should not exceed 75% of the wing span or rotor diameter.
- Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety.

COMPATIBILITY TESTING AND TANK MIX PARTNERS

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

- When considering mixing **SEIKO** with other pesticides, or other additives, first contact your supplier for advice.
- For further information, contact your local Sharda USA LLC representative. If your supplier and Sharda USA LLC representative have no experience
- To determine physical compatibility, add the recommended proportions of each chemical with the same proportion of water, as will be present in the chemical supply tank, into a suitable container, mix thoroughly and allow to stand for five minutes. If the combination remains mixed, or can be readily re-mixed, the mixture is considered physically compatible.

Compatibility

SEIKO is physically and biologically compatible with many registered pesticides and fertilizers or micronutrients. However, it is known that many components, including crop protection products, fertilizers, micronutrients, and spray adjuvants, may be present in a tank mix combination. There is potential for adverse chemical reactions. It is impossible to determine physical, biological, and plant compatibility for all scenarios that may be encountered; therefore, it is recommended that users determine the chemical, physical, biological and plant compatibility of such mixes prior to making applications on a broad commercial scale. Observe the most restrictive of the labeling instructions and precautions of all products used in mixtures.

Order of Mixing

The proper mixing procedure for **SEIKO** alone or in tank mix combinations with other pesticides is:

1. Fill the spray tank 1/4 to 1/3 full with clean water;
2. While recirculating and with the agitator running, add any products in Polyvinyl acetate (PVA) bags (See **Note**). Allow time for thorough mixing;
3. Continue to fill spray tank with water until 1/2 full;
4. Add any other wettable powder (WP) or wettable granules (WG) products;
5. Add the required amount of **SEIKO**, and any other "flowable" (FL or SC) type products;
6. Allow enough time for thorough mixing of each product added to tank;
7. If applicable, add any remaining tank mix components: emulsifiable concentrates (EC), fertilizers, micronutrients, spray adjuvants.
8. Fill spray tank to desired level and maintain constant agitation to ensure uniformity of spray mixture.

Note: DO NOT use PVA packets in a tank mix with products that contain boron or release free chlorine. The resultant reaction of PVA and boron or free chlorine is a plastic that is not soluble in water or solvents. For tank mixing with **SEIKO**, WSP packaged product user must carefully follow the label directions provided on those product labels.

ROTATIONAL CROPS

SEIKO is labeled for use on the following crops:

Banana and Plantain, Brassica (Cole) Leafy Vegetables (crop group 5), Bulb Vegetables (crop group 3-07A & 3-07B), Bushberry and Low Growing Berry (Crop Subgroups 13-07B and 13-07H), Carrot, Christmas Tree Plantations, Citrus Fruits (crop group 10-10), Coffee, Fruiting Vegetables (crop group 8-10), Globe Artichoke, Hops, Leafy Vegetables (except Brassica) (crop group 4), Legume Vegetables (except Soybean, dry) (crop group 6), Pineapple, Pome Fruits (crop group 11-10), Pomegranate, Potato and Other Tuberous And Corm Vegetables (crop group 1C), Small Fruit Vine Climbing Subgroup (except Fuzzy Kiwifruit) (crop group 13-07F), Soybean, Stone Fruits (crop group 12-12), Sugar beet, Tree Nuts (crop group 14-12), Tropical Fruits, and Watercress

- Treated areas may be replanted with any crop specified on this label, or any crop for which a tolerance exists for the active ingredient, as soon as practical following the last application.
- **DO NOT** plant or replant any crop not listed on this label within 30 days after the last application except watercress, which has 260-day plant-back interval (PBI).

SPECIFIC CROP DIRECTIONS

CROP USE DIRECTIONS

Apply specified dosage of **SEIKO** early in the infestation as the population begins to develop or at early threshold for the target insect pest. Apply higher dosages specified within the crop specific sections when applied as a preventive application, for moderate to heavy insect pressure, or where longer residual control is desired. Degree of efficacy against labeled pests will be determined, in part, by the stage of pest development at application and infestation level of those pests.

Apply in adequate water for uniform coverage. For tree and vine crops, apply in a minimum of 50 GPA for conventional ground airblast sprayer, 30 GPA for high air velocity, low volume, or air curtain sprayers, 10 GPA for aerial application; rates for tree and vine crops are based on full-size mature trees and vines. For field crops, apply in a minimum of 10 GPA by ground and 5 GPA by aerial application. For vegetable and potato crops, apply in a minimum of 15 GPA by ground and 5 GPA by aerial application.

SEIKO may also be applied through overhead irrigation systems as designated in the **CHEMIGATION** section of this label under **Chemigation Application Instructions**.

SEIKO must be tank-mixed with a spray adjuvant/additive having spreading and penetrating properties to maximize leaf uptake and systemicity of the active ingredient within treated plants; please contact your local Sharda USA LLC representative for specific recommendations by crop. However, the use of Induce[®] adjuvant in combination with **SEIKO** on grape, pome fruits, and stone fruits is prohibited when fruit is present due to adverse plant compatibility on harvested commodities. The tank-mixture of **SEIKO** with an adjuvant/additive having sticking properties or crop protection product formulations containing built-in stickers have been shown to interfere with leaf uptake and should be avoided. Sufficient leaf tissue must be present for uptake and translocation of this product; due to this requirement, **DO NOT** apply prior to petal-fall on pome fruits, stone fruits, and tree nut crops.

It is widely known that tank mixtures and/or sequential treatments of horticultural spray oil with Captan and/or sulfur may cause adverse plant compatibility in tree and vine crops; including **SEIKO** in this tank mix and/or sequential treatment scenario is not recommended.

BANANA and PLANTAIN (HI, PR, FL only)	
Pests Controlled	Product Rate
Aphids	fl. oz./A (lb. a.i./A)
	16.0 - 25.6 (0.16 - 0.25)
Restrictions:	
<ul style="list-style-type: none">• Pre-Harvest Interval (PHI): 1 day• Minimum interval between applications: 14 days• Maximum SEIKO allowed per year: 128 fl. oz./A• Maximum spirotetramat per year: 1.25 lbs. a.i./A	

BRASSICA (COLE) LEAFY VEGETABLES

Crops of Crop Group 5 Including: Broccoli, Broccoli raab (rapini), Brussels sprouts, Cabbage, Cauliflower, Cavalo broccolo, Chinese broccoli (gai lon), Chinese cabbage (bok choy), Chinese cabbage (napa), Chinese mustard cabbage (gai choy), Collards, Kale, Kohlrabi, Mizuna, Mustard greens, Mustard spinach, Rape greens

Pests Controlled	Product Rate
Aphids Swede midge Whiteflies	fl. oz./A (lb. a.i./A)
Pests Suppressed	5.0 - 8.0 (0.05 - 0.08)
Diamondback moth Nematodes Onion thrips (larvae)	

Restrictions:

- Pre-Harvest Interval (PHI): **1 day**
- Minimum interval between applications: **7 days**
- Maximum **SEIKO** allowed per year: **16 fl. oz./A**
- Maximum spirotramat allowed per year: **0.16 lb. a.i./A**
- Certain nonionic and organosilicone adjuvants, which may potentially be used with **SEIKO**, have caused intolerable damage to bok choy, napa, mustard spinach, mizuna, and mustard greens when applied alone, in the absence of **SEIKO**. Testing has shown that **SEIKO** does not increase the potential for damage when used in combination with such adjuvants. Due to the wide variety and composition of spray adjuvants that may be used in combination with **SEIKO**, only use a spreading-penetrating adjuvant that is known to be safe to the target crop.

BULB VEGETABLES

Crops of Crop Subgroup 3-07A Including: Daylily (bulb), Fritillaria (bulb), Garlic (bulbs of common, great-headed, Serpent), Lily (bulb), Onion (bulbs of common, Chinese, Pearl, potato onion), Shallot (bulb), plus cultivars, varieties, and/or hybrids of these.

Crops of Crop Subgroup 3-07B Including: Chinese chive (fresh leaves), Chive (fresh leaves), Elegans hosta, Fritillaria (leaves), Kurrat, Leek (Allium porrum, Lady's, Wild), Onion (Beltsville bunching, fresh, green, macrostem, tree tops, Welsh tops), Shallot (fresh leaves), plus cultivars, varieties, and/or hybrids of these.

Pests Controlled	Product Rate
	fl. oz./A (lb. a.i./A)
Onion thrips (larvae)	8.0 (0.08)

Restrictions:

- Pre-Harvest Interval (PHI): **3 days (members of Subgroup 3-07A); 7 days (members of Subgroup 3-07B)**
- Minimum interval between applications: **7 days**
- Maximum **SEIKO** allowed per year: **16 fl. oz./A**
- Maximum spirotramat allowed per year: **0.16 lb. a.i./A**
- For Onions, Leeks and Chives grown for seed production, **DO NOT** apply 4 months prior to bloom, during bloom or until after petal fall.

BUSHBERRY SUBGROUP**LOW GROWING BERRY SUBGROUP**

Crops of Crop Subgroups 13-07B and 13-07H Including: Aronia berry, Bearberry, Bilberry, Blueberry (highbush and lowbush), Chilean guava, Cloudberry, Cranberry, Currant (black, buffalo, native, and red), Elderberry, European barberry, Gooseberry, Edible honeysuckle, Jostaberry, Juneberry, Muntries, Lingonberry, Partridgeberry, Salal, Sea buckthorn, and cultivars, varieties, and/or hybrids of these.

Pests Controlled	Product Rate
Aphids	fl. oz./A (lb. a.i./A)
Blueberry gall midge	12.0 - 16.0
Cranberry tipworm	(0.12 - 0.16)
Thrips (larvae)	
Pests Suppressed	Product Rate
	fl. oz./A (lb. a.i./A)
Blueberry maggot	16.0
Leafhoppers	(0.16)

Restrictions:

- Pre-Harvest Interval (PHI): **7 days**
- Minimum interval between applications: **7 days**
- Maximum **SEIKO** allowed per calendar year: **48 fl. oz./A (0.47 lb. a.i./Acre)**
- **DO NOT** apply until after petal fall.

CARROT

Pests Controlled	Product Rate
	fl. oz./A (lb. a.i./A)
Aphids	8.0
Whiteflies	(0.08)

Restrictions:

- Pre-Harvest Interval (PHI): **1 day**
- Minimum interval between applications: **7 days**
- Maximum **SEIKO** allowed per year: **16 fl. oz./A**
- Maximum spirotetramat allowed per year: **0.16 lb. a.i./A**

CHRISTMAS TREE PLANTATIONS

Pests Controlled	Product Rate
	fl. oz./A (lb. a.i./A)
Aphids (including root aphids and Adelgids)	8.0 - 16.0
Scales	(0.08 - 0.16)

Restrictions:

- Minimum interval between applications: **14 days**
- Maximum **SEIKO** allowed per calendar year: **32 fl. oz./A**
- Maximum spirotetramat allowed per calendar year: **0.31 lb. a.i./A**

CITRUS FRUITS

Crops of Crop Group 10-10 Including: Australian lime (desert, finger, and round), Brown River finger lime, Calamondin, Citron, Grapefruit, Japanese summer grapefruit, Kumquat, Lemon, Lime, Mediterranean mandarin, Mount White lime, New Guinea wild lime, Orange (sour and sweet), Pummelo, Russell River lime, Satsuma mandarin, Sweet lime, Tachibana orange, Tahiti lime, Tangelo, Tangerine, Tangor, Trifoliolate orange, Uniq fruit, including cultivars, varieties, and/or hybrids of these commodities.

Pests Controlled	Product Rate
	fl. oz./A (lb. a.i./A)
Aphids Asian citrus psyllid California red scale Citrus leafminer Citrus bud mite Citrus red mite Citrus rust mite (silver mite) Citrus snow scale Citrus thrips Florida red scale Mealybugs Pink citrus rust mite Purple scale Texas citrus mite Whiteflies	12.0 - 16.0 (0.12 - 0.16)
Pests Suppressed	
Black scale Brown scale Citricola scale Cottony cushion scale Nematodes	

Restrictions:

- Pre-Harvest Interval (PHI): **1 day**
- Minimum interval between applications: **21 days**
- Maximum **SEIKO** allowed per calendar year: **32 fl. oz./A**
- Maximum spirotetramat per calendar year: **0.31 lb. a.i./A**
- For production areas in Alabama, Florida, Georgia, Louisiana, Mississippi, South Carolina, and Texas, optimum control of target pests is obtained at application volumes up to 250 gpa; application volumes in excess of 350 gpa must be avoided.
- **DO NOT** apply this product within 10 days prior to bloom, during bloom, or until petal fall is complete.
- **DO NOT** apply non-ionic surfactants in tank mix combination with **SEIKO** on white grapefruit.

COFFEE

Pests Controlled	Product Rate
	fl. oz./A (lb. a.i./A)
Green scale	12.0 - 16.0 (0.12 - 0.16)

Restrictions:

- Pre-Harvest Interval (PHI): **7 days**
- Minimum interval between applications: **21 days**
- Maximum **SEIKO** allowed per calendar year: **48 fl. oz./A**
- Maximum spirotetramat per calendar year: **0.47 lb. a.i./A**

FRUITING VEGETABLES

Crops of Crop Group 8-10 Including: African eggplant, Bush tomato, Cocona, Currant tomato, Eggplant, Garden huckleberry, Goji berry, Groundcherry, Martynia, Naranjilla, Okra, Pea eggplant, Pepino, Pepper (bell and nonbell*), Roselle, Scarlet eggplant, Sunberry, Tomatillo, Tomato, Tree tomato, including cultivars, varieties, and/or hybrids of these commodities.

*including cayenne, chili pepper, habanero, jalapeno, pablano, pimento, and serrano.

Pests Controlled	Product Rate
Aphids Broad mite Psyllids Tomato russet mite Whiteflies	fl. oz./A (lb. a.i./A)
Pests Suppressed	5.0 - 8.0 (0.05 - 0.08)
Leafminers Nematodes Twospotted spider mite Western flower thrips (larvae)	
Restrictions:	
<ul style="list-style-type: none"> • Pre-Harvest Interval (PHI): 1 day • Minimum interval between applications: 7 days • Maximum SEIKO allowed per year: 16 fl. oz./A • Maximum spirotetramat per year: 0.16 lb. a.i./A 	

GLOBE ARTICHOKE

Pests Controlled	Product Rate
Aphids	fl. oz./A (lb. a.i./A)
	8.0 - 12.0 (0.08 - 0.12)
Restrictions:	
<ul style="list-style-type: none"> • Pre-Harvest Interval (PHI): 3 days • Minimum interval between applications: 7 days • Maximum SEIKO allowed per year: 51.2 fl. oz./A • Maximum spirotetramat per year: 0.5 lb. a.i./A 	

HOPS

Pests Controlled	Product Rate
Hop aphid Twospotted spider mite	fl. oz./A (lb. a.i./A)
	8.0 - 10.0 (0.08 - 0.10)
Restrictions:	
<ul style="list-style-type: none"> • Pre-Harvest Interval (PHI): 7 days • Minimum interval between applications: 14 days • Maximum SEIKO allowed per calendar year: 20 fl. oz./A • Maximum spirotetramat per calendar year: 0.2 lb. a.i./A 	

LEAFY VEGETABLES (Except Brassica Vegetables)	
Crops of Crop Group 4 Including: Amaranth (leafy amaranth, Chinese spinach, tampala), Arugula (Rocket), Cardoon, Celery, Celtuce, Chervil, Chinese celery, Chrysanthemum (edible-leaved and garland), Corn salad, Cress (garden), Cress (upland, yellow rocket, winter cress), Dandelion, Dock (sorrel), Endive (escarole), Florence fennel (Finocchio), Lettuce (head and leaf), Orach, Parsley, Purslane (garden and winter), Radicchio (red chicory), Rhubarb, Spinach including New Zealand and vine (Malabar spinach, Indian spinach), Swiss chard, Taro leaves	
Pests Controlled	Product Rate
Aphids Whiteflies	fl. oz./A (lb. a.i./A)
Pests Suppressed	
Diamondback moth Leafminers Nematodes Western flower thrips (larvae)	5.0 - 8.0 (0.05 - 0.08)
Restrictions:	
<ul style="list-style-type: none"> • Pre-Harvest Interval (PHI): 3 days • Minimum interval between applications: 7 days • Maximum SEIKO allowed per year: 16 fl. oz./A • Maximum spirotetramat per year: 0.16 lb. a.i./A 	

LEGUME VEGETABLES	
Crops of Crop Group 6 (except soybean, dry) including: Edible Podded and Succulent Shelled Pea and Bean and Dried Shelled Pea and Bean	
Bean (<i>Lupinus</i> spp., including grain lupin, sweet lupin, white lupin, and white sweet lupin)	
Bean (<i>Phaseolus</i> spp., including field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean)	
Bean (<i>Vigna</i> spp., including adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea, Crowder pea, moth bean, mung bean, rice bean, Southern pea, urd bean, yardlong bean)	
Pea (<i>Pisum</i> spp., including dwarf pea, edible-pod pea, English pea, field pea, garden pea, green pea, snow pea, sugar snap pea)	
Other Beans and Peas (Broad bean (fava), Chickpea (garbanzo bean), Guar, Jackbean, Lablab bean (hyacinth bean), Lentil, Pigeon pea, soybean (immature seed), Sword bean)	
Pests Controlled	Product Rate
Aphids Whiteflies	fl. oz./A (lb. a.i./A)
Pests Suppressed	
Leafminers Melon thrips (larvae) Nematodes Twospotted spider mite Western flower thrips (larvae)	5.0 - 8.0 (0.05 - 0.08)
Restrictions:	
<ul style="list-style-type: none"> • Pre-Harvest Interval (PHI): 1 day (edible podded and succulent beans and peas); 7 day (dry shelled beans and peas) • Minimum interval between applications: 7 days • Maximum SEIKO allowed per year: 16 fl. oz./A • Maximum spirotetramat per year: 0.16 lb. a.i./A 	

PINEAPPLE	
Pests Controlled	Product Rate
Mealybugs	fl. oz./A (lb. a.i./A)
	16.0 (0.16)
Restrictions: <ul style="list-style-type: none"> • Pre-Harvest Interval (PHI): 1 day • Minimum interval between applications: 14 days • Maximum SEIKO allowed per year: 32 fl. oz./A • Maximum spirotetramat per year: 0.31 lb. a.i./A 	

POME FRUITS	
Crops of Crop Group 11-10 Including: Apple, Asian pear, Azarole, Chinese quince, Crabapple, Japanese quince, Loquat, Mayhaw, Medlar, Pear, Quince, Tejocote, including cultivars, varieties, and/or hybrids of these commodities.	
Pests Controlled	Product Rate
Aphids (including Woolly apple aphid) Apple rust mite Mealybugs Pear psylla Pear rust mite San Jose scale Whiteflies	fl. oz./A (lb. a.i./A)
	8.0 - 14.0 (0.08 - 0.14)
Pests Suppressed	
Apple gall midge Codling moth European red mite Micro-lepidoptera leafminers Pear leaf midge Twospotted spider mite White apple leafhopper	
Restrictions: <ul style="list-style-type: none"> • Pre-Harvest Interval (PHI): 7 days • Minimum interval between applications: 14 days • Maximum SEIKO allowed per calendar year: 40 fl. oz./A • Maximum spirotetramat per calendar year: 0.39 lb. a.i./A • DO NOT apply prior to petal-fall. • For control of San Jose scale west of the Rocky Mountains including all of MT, WY, CO, and NM, apply immediately after petal fall, followed by a second application 14 - 21 days later. For control of San Jose scale east of the Rocky Mountains, apply immediately after petal fall; under heavy infestation pressure or where difficult control conditions exist, a second application may be necessary. 	

POMEGRANATE	
Pests Controlled	Product Rate
Aphids Whiteflies	fl. oz./A (lb. a.i./A)
	12.0 - 16.0 (0.12 - 0.16)
Restrictions: <ul style="list-style-type: none"> • Pre-Harvest Interval (PHI): 1 day • Minimum interval between applications: 14 days • Maximum SEIKO allowed per calendar year: 32 fl. oz./A • Maximum spirotetramat per calendar year: 0.31 lb. a.i./A 	

POTATO and OTHER TUBEROUS AND CORM VEGETABLES

Crops of Crop Subgroup 1C Including: Arracacha, Arrowroot, Artichoke (Chinese and Jerusalem), Canna (edible), Cassava (bitter and sweet), Chayote (root), Chufa, Dasheen (taro), Ginger, Leren, Potato, Sweet potato, Tanier, Turmeric, Yam bean, Yam (true)

Pests Controlled	Product Rate
Aphids Psyllids Whiteflies	fl. oz./A (lb. a.i./A)
Pests Suppressed	6.0 - 8.0 (0.06 - 0.08)
Nematodes Twospotted spider mite Western flower thrips (larvae) Wireworms	
Restrictions:	
<ul style="list-style-type: none"> • Pre-Harvest Interval (PHI): 7 days • Minimum interval between applications: 7 days • Maximum SEIKO allowed per year: 16 fl. oz./A • Maximum spirotetramat per year: 0.16 lb. a.i./A 	

SMALL FRUIT VINE CLIMBING SUBGROUP (Except Fuzzy Kiwifruit)

Crops of Crop Subgroup 13-07F Including: Amur river grape, Gooseberry, Grape, Kiwifruit (hardy), Maypop, Schisandra berry

Pests Controlled	Product Rate
Grape tumid gallmaker Mealybugs Phylloxera Willamette mite Whiteflies	fl. oz./A (lb. a.i./A)
Pests Suppressed	8.0 - 12.0 (0.08 - 0.12)
European fruit lecanium scale Pacific mite Twospotted spider mite Nematodes	
Restrictions:	
<ul style="list-style-type: none"> • Pre-Harvest Interval (PHI): 7 days • Minimum interval between applications: 30 days • Maximum SEIKO allowed per calendar year: 20 fl. oz./A • Maximum spirotetramat per calendar year: 0.2 lb. a.i./A • Some adjuvants that may be used with SEIKO have caused intolerable damage to grape berries/clusters when applied alone or in mixes after the initiation of bloom. Testing has shown that SEIKO does not increase the potential for damage when used in combination with such adjuvants; however, not all adjuvants have been tested. It is recommended that a high quality spreading-penetrating adjuvant be used at a rate that is known to be safe to the crop. 	

SOYBEAN	
Pests Controlled	Product Rate
Aphids Whiteflies	fl. oz./A (lb. a.i./A) 4.0 - 8.0 (0.04 - 0.08)
Restrictions: <ul style="list-style-type: none"> • Pre-Harvest Interval (PHI): 21 days • Minimum interval between applications: 7 days • Maximum SEIKO allowed per year: 16 fl. oz./A • Maximum spirotetramat per year: 0.16 lb. a.i./A 	

STONE FRUITS	
Crops of Crop Group 12-12 Including: Apricot; apricot, Japanese; capulin; cherry, black; cherry, Nanking; cherry, sweet; cherry, tart; Jujube, Chinese; nectarine; peach; plum; plum, American; plum, beach; plum, Canada; plum, cherry; plum, Chickasaw; plum, Damson; plum, Japanese; plum, Klamath; plum, prune; plumcot; sloe; cultivars, varieties, and/or hybrids of these.	
Pests Controlled	Product Rate
Aphids Mealybugs San Jose scale White peach scale Whiteflies	fl. oz./A (lb. a.i./A)
Pests Suppressed	
Black scale Cherry fruit fly European fruit lecanium scale European red mite Nematodes Spotted wing drosophila Twospotted spider mite	8.0 - 14.0 (0.08 - 0.14)
Restrictions: <ul style="list-style-type: none"> • Pre-Harvest Interval (PHI): 7 days • Minimum interval between applications: 14 days • Maximum SEIKO allowed per calendar year: 24 fl. oz./A • Maximum spirotetramat per calendar year: 0.24 lb. a.i./A • DO NOT apply prior to petal-fall. • For control of San Jose scale, apply immediately after petal fall; under heavy infestation pressure or where difficult control conditions exist, a second application may be necessary. 	

SUGAR BEET	
Pests Controlled	Product Rate
Bean aphid Root aphid Whiteflies	fl. oz./A (lb. a.i./A)
Pests Suppressed	7.2 - 14.4 (0.07 - 0.14)
Root maggot Sugarbeet cyst nematode	
Restrictions: <ul style="list-style-type: none"> • Pre-Harvest Interval (PHI): 28 days • Minimum interval between applications: 14 days • Maximum SEIKO allowed per year: 28.8 fl. oz./A • Maximum spirotetramat per year: 0.28 lb. a.i./A 	

TREE NUTS	
Crops of Crop Group 14-12 Including: African nut-tree; almond; beechnut; Brazil nut; Brazilian pine; bunya; bur oak; butternut; Cajou nut; candlenut; cashew; chestnut; chinquapin; coconut; coquito nut; dika nut; ginkgo; Guiana chestnut; hazelnut (filbert); heartnut; hickory nut; Japanese horse-chestnut; macadamia nut; mongongo nut; monkey-pot; monkey puzzle nut; Okari nut; Pachira nut; peach palm nut; pecan; pequi; Pili nut; pine nut; pistachio; Sapucaia nut; tropical almond; walnut, black; walnut, English; yellowhorn; cultivars, varieties, and/or hybrids of these.	
Pests Controlled	Product Rate
Aphids Mealybugs Phylloxera San Jose scale Walnut scale Whiteflies	fl. oz./A (lb. a.i./A)
Pests Suppressed	8.0 - 14.0 (0.08 - 0.14)
European fruit lecanium scale Nematodes Olive scale Pacific mite Twospotted spider mite	
Restrictions: <ul style="list-style-type: none"> • Pre-Harvest Interval (PHI): 7 days • Minimum interval between applications: 14 days • Maximum SEIKO allowed per calendar year: 34 fl. oz./A • Maximum spirotetramat per calendar year: 0.34 lb. a.i./A • DO NOT apply prior to petal-fall. • For control of San Jose scale, apply immediately after petal fall; under heavy infestation pressure or where difficult control conditions exist, a second application may be necessary. 	

TROPICAL FRUIT	
Acerola, Avocado, Black sapote, Canistel, Feijoa, Jaboticaba, Guava, Longan, Lychee, Mamey sapote, Mango, Papaya, Passionfruit, Persimmon, Pulasan, Rambutan, Sapodilla, Spanish lime, Star apple, Starfruit, Wax jambu, White sapote (<i>Casimiroa</i> spp.)	
Pests Controlled	Product Rate
Aphids Avocado thrips Mealybugs Scales Whiteflies	fl. oz./A (lb. a.i./A)
Pests Suppressed	13.0 - 16.0 (0.13 - 0.16)
Avocado brown mite Papaya leaf edgeroller mite Persea mite Twospotted spider mite	
Restrictions: <ul style="list-style-type: none"> • Pre-Harvest Interval (PHI): 1 day • Minimum interval between applications: 14 days • Maximum SEIKO allowed per calendar year: 40 fl. oz./A • Maximum spirotetramat per calendar year: 0.39 lb. a.i./A 	

WATERCRESS	
Pests Controlled	Product Rate
Aphids	fl. oz./A (lb. a.i./A)
	6.0 - 20.0 (0.06 - 0.2)
Restrictions: <ul style="list-style-type: none"> • Pre-Harvest Interval (PHI): 3 days • Minimum interval between applications: 7 days • Maximum SEIKO allowed per year: 40 fl. oz./A • Maximum spirotetramat per year: 0.39 lb. a.i./A • DO NOT plant or replant any crop not listed on this label within 260 days after the last application. 	

STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage or disposal.

PESTICIDE STORAGE: If exposed to subfreezing temperatures (below 32°F), the product should be warmed to at least 40°F and agitated thoroughly before using.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of Federal law. If these wastes cannot be used 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 HANDLING:

Less Than or Equal to 5 Gallons: Nonrefillable container. **DO NOT** reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill.

Greater Than 5 Gallons: Refillable container. Refill this container with pesticide only. **DO NOT** reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures allowed by State and local authorities.

Greater Than 5 Gallons: Nonrefillable container. **DO NOT** reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures allowed by State and local authorities.

For Bulk and Mini-Bulk Containers: Refillable container. Refill this container with pesticide only. **DO NOT** use this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the person refilling. To clean container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures allowed by State and local authorities.

CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER!

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Sharda USA LLC or Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Sharda USA LLC and Seller harmless for any claims relating to such factors.

Sharda USA LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under conditions not reasonably foreseeable to or beyond the control of Seller or Sharda USA LLC and Buyer and User assume the risk of any such use. To the extent consistent with applicable law, SHARDA USA LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent consistent with applicable law, neither Sharda USA LLC nor Seller shall be liable for any incidental, consequential, or special damages resulting from the use or handling of this product. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SHARDA USA LLC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SHARDA USA LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

Sharda USA LLC and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of Sharda USA LLC.

All trademarks are the property of their respective owners.

PRIMEROS AUXILIOS	
SI CAE EN LA PIEL O LA ROPA:	<ul style="list-style-type: none"> • Quítese la ropa contaminada. • Enjuague la piel inmediatamente con bastante agua por 15 - 20 minutos. • Llame al centro de control de envenenamientos o a un médico para consejo de tratamiento.
SI SE INGIERE:	<ul style="list-style-type: none"> • Llame de inmediato a un centro de control de envenenamientos o a un médico para consejo de tratamiento. • Si la persona puede tragar, haga que beba un vaso de agua lentamente. • NO induzca el vómito a menos que así se lo indique un centro de control de envenenamientos o un médico. • NO administre nada por boca a una persona que haya perdido el conocimiento.
SI ENTRA EN CONTACTO CON LOS OJOS:	<ul style="list-style-type: none"> • Mantenga los ojos abiertos y enjuáguelos lenta y cuidadosamente con agua, durante 15 a 20 minutos. • Si utiliza lentes de contacto, retírelos después de los primeros 5 minutos, luego continúe enjuagando los ojos. • Llame al centro de control de envenenamientos o a un médico para consejo de tratamiento.
NOTA AL MÉDICO	
No existe un antídoto específico. Se debe tratar al paciente sintomáticamente.	
NÚMERO DE TELÉFONO DIRECTO	
Cuando llame a un centro de control de envenenamiento, o a un médico, o intente obtener tratamiento, tenga a la mano el envase o la etiqueta del producto. Para información de emergencia sobre este producto, llame al centro de control de envenenamientos a 1-800-222-1222 . Para información general sobre este producto, contacte al Centro Nacional de Información de Pesticidas (NPIC, por sus siglas en inglés) a 1-800-858-7378 , Lunes a Viernes, 8 AM a 12 PM PST (hora del Pacífico), o a http://npic.orst.edu .	

DECLARACIONES PREVENTIVAS

RIESGOS PARA LOS SERES HUMANOS Y ANIMALES DOMÉSTICOS

PRECAUCIÓN

Dañino si se ingiere o es absorbido por la piel. Causa irritación moderada en los ojos. Evite el contacto con los ojos, la piel o la ropa. Lávese bien con agua y jabón después de manipular y antes de comer, beber, masticar chicle, o usar tabaco. El contacto prolongado y frecuente con la piel puede causar reacciones alérgicas en algunos individuos.

EQUIPO DE PROTECCIÓN PERSONAL (PPE, POR SUS SIGLAS EN INGLÉS)

Siga las instrucciones del fabricante para la limpieza y el mantenimiento del equipo de protección personal (PPE, por sus siglas en inglés). En caso de no existir dichas instrucciones de lavado, utilice detergente y agua caliente. Mantenga y lave el PPE por separado del resto de la ropa.

Los aplicadores y otros manipuladores deberán usar:

- Camisa de manga larga y pantalones largos
- Guantes resistentes a productos químicos fabricados con laminados impermeables, goma de butilo ≥ 14 mils; goma de nitrilo ≥ 14 mils; cloruro de polivinilo (PVC) ≥ 14 mils, o Viton ≥ 14 mils
- Zapatos y calcetines

DECLARACIÓN DE CONTROL TÉCNICO

Cuando los manipuladores de este producto utilizan sistemas cerrados o cabinas cerradas de conformidad con los requisitos estipulados en el Estándar para la Protección del Trabajador (WPS, según siglas en inglés) relativos a los pesticidas agrícolas [40 CFR 170.240 (d)(4-6)], es posible reducir o modificar los requisitos relativos al equipo protector personal del manipulador, según lo especificado en el WPS.

RIESGOS AMBIENTALES

Para uso terrestre: Este pesticida es tóxico para invertebrados acuáticos y las ostras. **NO** aplique directamente al agua, en áreas donde haya aguas superficiales, o en áreas intermareales que se encuentren bajo el nivel de altura máxima promedio del agua. Este producto puede contaminar el agua debido a la deriva de la aspersión por la acción del viento. **NO** aplique cuando las condiciones meteorológicas favorezcan la deriva desde las áreas tratadas. La deriva y la escorrentía pueden ser peligrosas para los organismos acuáticos en áreas adyacentes. **NO** contamine el agua al desechar las aguas de lavado o los líquidos de enjuague (rinsate) del equipo.

Este producto químico tiene propiedades y características relacionadas con productos químicos detectados en aguas subterráneas. El uso de este producto químico en zonas con suelos permeables, especialmente donde el nivel freático es poco profundo, puede provocar la contaminación de las aguas subterráneas.

Este producto es potencialmente tóxico para las larvas de abejas melíferas a través de residuos en el polen y el néctar, pero no para las abejas adultas. La exposición de las abejas adultas a tratamientos directos o a residuos en cultivos en floración puede provocar efectos en las larvas de abeja melífera. Consulte la sección **Instrucciones de uso** de esta etiqueta para obtener instrucciones específicas de aplicación en cultivos que minimicen el riesgo para las larvas de abejas melíferas.

Gestión de escorrentías

Este producto puede contaminar el agua a través de la escorrentía o de la deriva de la aspersión por el viento. Este producto tiene un alto potencial de escurrimiento durante varias semanas después de su aplicación. Los suelos con drenaje deficiente y los suelos con niveles freáticos poco profundos son más propensos a generar escorrentía que contiene este producto. Una franja de protección o amortiguamiento vegetativo, nivelada y bien mantenida entre las áreas donde este producto es utilizado y cuerpos de agua superficiales tales como estanques, arroyos y manantiales, reducirá el potencial de contaminación del agua por escorrentía de lluvia. Escorrentías de este producto pueden ser reducidas al evitar aplicaciones cuando se pronostique lluvia dentro de 48 horas.

Aviso sobre especies en peligro de extinción/Requisitos de protección

El uso de cualquier pesticida de una manera que pueda matar o dañar de otro modo a especies en peligro de extinción, o modificar adversamente su hábitat, constituye una violación de la ley federal.

El uso de este producto de forma contraria a lo indicado en su etiqueta constituye una infracción de la ley federal.

ALMACENAMIENTO Y DESECHO

NO contamine el agua, los alimentos ni los forrajes durante el almacenamiento o el desecho.

ALMACENAMIENTO DE PESTICIDAS: Si se expone a temperaturas bajo cero (por debajo de 32 °F), el producto debe calentarse al menos a 40 °F y agitarse completamente antes de usarlo.

DESECHO DE PESTICIDAS: Los residuos de pesticidas son tóxicos. Los residuos resultantes del uso de este producto deben eliminarse en el lugar de origen o en una instalación de eliminación de residuos autorizada. La disposición inadecuada de pesticidas, mezclas de pulverización o agua de enjuague no utilizados constituye una infracción a la ley federal. Si estos residuos no pueden ser eliminados de acuerdo con las instrucciones de la etiqueta, contacte la agencia estatal de plaguicidas o de control ambiental de su estado, o el representante para el Manejo de Residuos Peligrosos de la Oficina Regional de la EPA más cercana para obtener instrucciones sobre métodos adecuados de eliminación.

MANIPULACIÓN DE ENVASES:

Menos o igual a 5 galones: Envase no rellenable. **NO** reutilice ni rellene este envase. Ofrézcalo para reciclaje si está disponible. Enjuague tres veces el envase (o equivalente) inmediatamente después de vaciarlo. Enjuague tres veces siguiendo estas indicaciones: vacíe los contenidos restantes en el equipo de aplicación o un tanque de mezcla, y drene por 10 segundos después de que el flujo empiece a gotear. Llene el envase hasta 1/4 de su capacidad con agua y tape de nuevo. Agite por 10 segundos. Vierta el líquido de enjuague (rinsate) en el equipo de aplicación o tanque de mezcla, o almacene el enjuague para uso posterior o eliminación. Drene por 10 segundos después de que el flujo empiece a gotear. Repita este procedimiento dos veces más. Luego ofrézcalo para reciclaje si está disponible o el reacondicionamiento si es adecuado, o perforo y deseche en un área adecuada para desechos sanitarios.

Más de 5 galones: Envase rellenable. Rellene este envase sólo con pesticida (plaguicida). **NO** utilice este envase para ningún otro propósito. La limpieza del envase antes de su eliminación final es la responsabilidad de la persona que se deshace del envase. La limpieza antes de rellenarlo es responsabilidad de la persona que lo rellena. Para limpiar el envase antes de su eliminación final, vacíe el contenido restante de este envase en el equipo de aplicación o en el tanque de mezcla. Llene el envase con un 10% de agua. Agite vigorosamente o haga recircular el agua con la bomba durante 2 minutos. Vierta o bombee el líquido de enjuague en el equipo de aplicación o en el sistema de recolección de líquido de enjuague. Repita este procedimiento dos veces más. Luego ofrézcalo para reciclaje si está disponible o el reacondicionamiento si es adecuado, o perforo y deseche en un área adecuada para desechos sanitarios o por otros procedimientos aprobados por las autoridades estatales y locales.

Más de 5 galones: Envase no rellenable. **NO** reutilice ni rellene este envase. Ofrézcalo para reciclaje si está disponible. Enjuague tres veces el envase (o equivalente) inmediatamente después de vaciarlo. Enjuague tres veces siguiendo estas indicaciones: vacíe los contenidos restantes en el equipo de aplicación o un tanque de mezcla. Llene el envase hasta 1/4 de su capacidad con agua. Reemplace y asegure los cierres. Vuelque el envase al lado y hágalo rodar por 30 segundos, asegurando por lo menos una revolución completa. Ponga el envase vertical e inclínelo hacia adelante y hacia atrás varias veces. Dé vuelta al envase hacia el lado opuesto e inclínelo hacia adelante y hacia atrás varias veces. Vierta el líquido de enjuague (rinsate) en el equipo de aplicación o tanque de mezcla, o almacene el enjuague para uso posterior o eliminación. Repita este procedimiento dos veces más. Luego ofrézcalo para reciclaje si está disponible o el reacondicionamiento si es adecuado, o perforo y deseche en un área adecuada para desechos sanitarios o por otros procedimientos aprobados por las autoridades estatales y locales.

Para contenedores y mini-contenedores a granel: Envase rellenable. Rellene este envase sólo con pesticida (plaguicida). **NO** utilice este envase para ningún otro propósito. La limpieza del envase antes de su eliminación final es la responsabilidad de la persona que se deshace del envase. La limpieza antes de rellenarlo es responsabilidad de la persona que lo rellena. Para limpiar el envase antes de su eliminación final, vacíe el contenido restante de este envase en el equipo de aplicación o en el tanque de mezcla. Llene el envase con un 10% de agua. Agite vigorosamente o haga recircular el agua con la bomba durante 2 minutos. Vierta o bombee el líquido de enjuague en el equipo de aplicación o en el sistema de recolección de líquido de enjuague. Repita este procedimiento dos veces más. Luego ofrézcalo para reciclaje si está disponible o el reacondicionamiento si es adecuado, o perforo y deseche en un área adecuada para desechos sanitarios o por otros procedimientos aprobados por las autoridades estatales y locales.

¡EL ENVASE NO ES SEGURO PARA ALIMENTOS, FORRAJES, NI AGUA POTABLE!

SPIROTETRAMAT GROUP 23 INSECTICIDE

SEIKO

For Agricultural Use Only: For control of listed insects on certain field, tree, tropical fruits, vine, and vegetable crops.

ACTIVE INGREDIENT:	WT. BY %
Spirotetramat: cis-3-(2,5-dimethylphenyl)-8-methoxy-2-oxo-1-azaspiro[4.5]dec-3-en-4-yl-ethyl carbonate	14.50%
OTHER INGREDIENTS:	85.50%
TOTAL:	100.00%

Contains 1.25 pounds spirotetramat per U.S. gallon (150 grams a.i./liter)

KEEP OUT OF REACH OF CHILDREN CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you **DO NOT** understand this label, find someone to explain it to you in detail.)

FIRST AID

IF ON SKIN OR CLOTHING: • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 - 20 minutes. • Call a poison control center or doctor for treatment advice. **IF SWALLOWED:** • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • **DO NOT** induce vomiting unless told to do so by a poison control center or doctor. • **DO NOT** give anything by mouth to an unconscious person. **IF IN EYES:** • Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.

NOTE TO PHYSICIAN

No specific antidote is available. Treat patient symptomatically.

HOTLINE NUMBERS

Have the product container or label with you when calling a poison control center or doctor or going for treatment. For emergency information concerning this product, call your poison control center at **1-800-222-1222**. For general information about this product, contact the National Pesticides Information Center (NPIC) at **1-800-858-7378**, Monday through Friday, 8 AM to 12 PM PST, or at <http://npic.orst.edu>.

PRECAUTIONARY STATEMENTS - HAZARDS TO HUMANS AND DOMESTIC ANIMALS - CAUTION - Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. **ENVIRONMENTAL HAZARDS - For Terrestrial Use:** This pesticide is toxic to aquatic invertebrates and oysters. **DO NOT** apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. This product may contaminate water through drift of spray in wind. **DO NOT** apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. **DO NOT** contaminate water when disposing of equipment washwaters or rinsate. This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. This product is potentially toxic to honey bee larvae through residues in pollen and nectar, but not to adult honeybees. Exposure of adult bees to direct treatment or residues on blooming crops can lead to effects on honeybee larvae. See the **DIRECTIONS FOR USE** section of this label for specific crop application instructions that minimize risk

to honey bee larvae. **Run Off Management:** This product may contaminate water through runoff or drift of spray in wind. This product has a high potential for runoff for several weeks after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. A level well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours. **Endangered Species Advisory/Protection Requirements:** The use of any pesticide in a manner that may kill or otherwise harm endangered species or adversely modify their habitat is a violation of Federal law. **DIRECTIONS FOR USE** - It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read the entire label before using this product.

STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage or disposal. **PESTICIDE STORAGE:** If exposed to subfreezing temperatures (below 32°F), the product should be warmed to at least 40°F and agitated thoroughly before using. **PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of Federal law. If these wastes cannot be used 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 HANDLING: Less Than or Equal to 5 Gallons:** Nonrefillable container. **DO NOT** reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill. **Greater Than 5 Gallons:** Refillable container. Refill this container with pesticide only. **DO NOT** reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures allowed by State and local authorities. **Greater Than 5 Gallons:** Nonrefillable container. **DO NOT** reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures allowed by State and local authorities. **For Bulk and Mini-Bulk Containers:** Refillable container. Refill this container with pesticide only. **DO NOT** use this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the person refilling. To clean container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures allowed by State and local authorities.

CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER!

See label booklet for complete Precautionary Statements, Directions For Use, and Storage and Disposal.

Manufactured For: Sharda USA LLC, 7217 Lancaster Pike, Suite A, Hockessin, Delaware 19707

EPA Reg. No. 83529-390 EPA Est. No. **(AG)** 72159-GA-001; **(MC)** 89332-GA-001; **(SC)** 39578-TX-001

The EPA Establishment Number is identified by the circled letters above that match the first two letters in the batch number.

Net Contents: **2.5 Gals.*** **265 Gals.**

* Unless alternate checked

OPEN HERE