



U.S. ENVIRONMENTAL PROTECTION AGENCY  
Office of Pesticide Programs  
Registration Division (7505T)  
1200 Pennsylvania Ave., N.W.  
Washington, D.C. 20460

EPA Reg. Number:

83529-307

Date of Issuance:

10/29/24

NOTICE OF PESTICIDE:

☒ Registration

☐ Reregistration

(under FIFRA, as amended)

Term of Issuance:

Unconditional

Name of Pesticide Product:

Sharda Dinotefuran 35% SL

Name and Address of Registrant (include ZIP Code):

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

**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 under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

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.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product when the Agency requires all registrants of similar products to submit such data.

*Continues page 2*

Signature of Approving Official:

Melissa Bridges, Product Manager 07  
Invertebrate-Vertebrate Branch III, Registration Division (7505T)

Date:

10/23/24

2. Make the following label changes before you release the product for shipment:
  - Revise the EPA Registration Number to read, “EPA Reg. No. 83529-307.”
3. Submit one copy of the final printed label for the record before you release the product for shipment.

Should you wish to add/retain a reference to the company’s website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) lists examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product’s label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA’s Office of Enforcement and Compliance.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

The record for this product currently contains the following CSF(s):

- Basic CSF dated 12/12/2023

If you have any questions, please contact Scott Campbell at [campbell.scott@epa.gov](mailto:campbell.scott@epa.gov)

Enclosure

[MASTER LABEL]

DINOTEFURAN

GROUP

4A

INSECTICIDE

# Sharda Dinotefuran 35%SL

**ABN: Tefura****For control of listed sucking and chewing insect pests in listed crops; for agricultural use only.****ACTIVE INGREDIENT:****WT. BY %**

Dinotefuran, N-methyl-N'-nitro-N''-((tetrahydro-3-furyl)methyl)guanidine.....35.00%

**OTHER INGREDIENTS:**.....65.00%**TOTAL:** .....100.00%

\*Contains 3.24 pounds active ingredient per gallon.

## KEEP OUT OF REACH OF CHILDREN CAUTION/PRECAUCION

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 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 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 IN EYES:**

- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after the first five minutes, then continue rinsing.
- Call a poison control center or doctor immediately for treatment advice.

**HOTLINE NUMBER**

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>.

[Optional referral statements when booklets and container labels are used:]

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

Manufactured for:

**Sharda USA LLC**7217 Lancaster Pike, Suite A  
Hockessin, Delaware 19707**ACCEPTED****10/29/2024**Under the Federal Insecticide, Fungicide  
and Rodenticide Act as amended, for the  
pesticide registered under  
EPA Reg. No.**83529-307**

EPA Reg No. 83529-XXX

EPA Est. No. XXXXX-XX-XXX

Net Contents: \_\_\_\_\_ Gals. [L.]

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### CAUTION

Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse. Wear long-sleeved shirt and long pants, socks, shoes, and appropriate chemical an/or waterproof gloves. Wear protective eyewear.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below. Follow the instructions for category A on an EPA chemical resistance category chart for more options.

#### Applicators and other handlers must wear:

- Coveralls
- Shoes plus socks
- Chemical-resistant gloves (made of any waterproof material)

#### USER SAFETY REQUIREMENTS

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions exist for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### USER SAFETY RECOMMENDATIONS

##### Users must:

- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco.
- Remove and wash contaminated clothe before reuse.

#### ENVIRONMENTAL HAZARDS

This pesticide is toxic to aquatic invertebrates. **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** apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in water adjacent to treated areas. **DO NOT** dispose of equipment wash waters or rinsate into a natural drain or water body. **DO NOT** contaminate water when disposing of equipment wash waters or rinsate.

This compound is highly toxic to honey bees. The persistence of residues and potential residual toxicity of Dinotefuran in nectar and pollen suggests the possibility of chronic toxic risk to honey bee larvae and the eventual instability of the hive.

This product is toxic to bees exposed to residue for more than 38 hours following treatment. **DO NOT** apply this product to blooming, pollen-shedding or nectar-producing parts of plants if bees may forage on the plants during this time period, unless the application is made in response to a public health emergency declared by appropriate state or federal authorities.

Dinotefuran and its degradate 1-Methyl-2-nitroguanidine (MNG), have the properties and characteristics associated with chemicals detected in groundwater. The high water solubility of Dinotefuran, and its degradate, MNG, coupled with their very high mobility, and resistance to biodegradation indicates that these compounds have a strong potential to leach to the subsurface under certain conditions as a result of label use. The use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

#### PROTECTION OF POLLINATORS



**APPLICATION RESTRICTIONS EXIST FOR THIS PRODUCT BECAUSE OF RISK TO BEES AND OTHER INSECT POLLINATORS. FOLLOW APPLICATION RESTRICTIONS FOUND IN THE DIRECTIONS FOR USE TO PROTECT POLLINATORS.**

Look for the bee hazard icon in the **DIRECTIONS FOR USE** for each application site for specific use restrictions and instructions to protect bees and other insect pollinators.

**This product can kill bees and other insect pollinators.** Bees and other insect pollinators will forage on plants when they flower, shed pollen, or produce nectar. Bees and other insect pollinators can be exposed to this pesticide from:

- Direct contact during foliar applications, or contact with residues on plant surfaces after foliar applications
- Ingestion of residues in nectar and pollen when the pesticide is applied as a seed treatment, soil, tree injection,

as well as foliar applications.

#### When Using This Product Take Steps To:

- Minimize exposure of this product to bees and other insect pollinators when they are foraging on pollinator attractive plants around the application site.
- Minimize drift of this product on to beehives or to off-site pollinator attractive habitat. Drift of this product onto beehives or off-site to pollinator attractive habitat can result in bee kills.

Information on protecting bees and other insect pollinators may be found at the Pesticide Environmental Stewardship website at:

<http://pesticidestewardship.org/PollinatorProtection/Pages/default.aspx>

Pesticide incidents (for example, bee kills) should immediately be reported to the state/tribal lead agency. For contact information for your state, go to: [www.aapco.org/officials.html](http://www.aapco.org/officials.html). Pesticide incidents should also be reported to the National Pesticide Information Center at: [www.npic.orst.edu](http://www.npic.orst.edu) or direct to EPA at: [beekill@epa.gov](mailto:beekill@epa.gov).

### DIRECTIONS FOR USE

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

#### For crops under contracted pollination services:

- **DO NOT** apply this product while bees are foraging.
- **DO NOT** apply this product until flowering is complete and all petals have fallen unless the following condition has been met.
  - If an application must be made when managed bees are at the treatment site, the beekeeper providing the pollination services must be notified no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected for 38 hours following application.



#### For food crops and commercially grown ornamentals not under contract for pollination services but are attractive to pollinators:

- **DO NOT** apply this product while bees are foraging.
- This product is toxic to bees exposed to residue for more than 38 hours following treatment.
- **DO NOT** apply this product to blooming, pollen-shedding or nectar-producing parts of plants if bees may forage on the plants during this time period, unless the application is made in response to a public health emergency declared by the appropriate State or Federal authorities.

READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.

**DO NOT** apply this product in a way that will contact workers or other person, 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 Workers Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, 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 worker entry into treated areas during the restricted entry interval (REI) of 12 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
- shoes plus socks, and
- Chemical-resistant gloves (made of any waterproof material).

### INSECT RESISTANCE MANAGEMENT

For resistance management, **Sharda Dinotefuran 35%SL** contains dinotefuran and is classified in the neonicotinoid chemical class as a Group 4A insecticide, which acts on the neonicotinoid acetylcholine receptors (nAChRs) of the central nervous system of insects. Any

insect population may contain individuals naturally resistant to **Sharda Dinotefuran 35%SL** and other Group 4A 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 **Sharda Dinotefuran 35%SL** or other Group 4A insecticides within a growing season, or among growing seasons, 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.
- For further information or to report suspected resistance, contact Sharda USA, LLC at <https://shardausa.com/>

#### APPLICATION INFORMATION

Failure to follow directions and precautions on this label may result in crop injury, poor insect control and /or illegal residues.

For best performance, always follow these directions:

- **Sharda Dinotefuran 35%SL** must be applied when insect pest populations begin to build, but before populations reach economically damaging levels. Economic thresholds for pests controlled by **Sharda Dinotefuran 35%SL** may be available from your State and County Extension Service.
- **Sharda Dinotefuran 35%SL** is a selective insecticide that has minimal impact on beneficial arthropods and its use is compatible with Integrated Pest Management (IPM) programs. However, **Sharda Dinotefuran 35%SL** is toxic to bees exposed to direct treatment or to residues on blooming crops and weeds.
- **Sharda Dinotefuran 35%SL** is taken up into foliage after application. However, thorough spray coverage is essential for optimal performance. Apply **Sharda Dinotefuran 35%SL** in sufficient water to ensure good coverage.
- **Sharda Dinotefuran 35%SL** may aid in the suppression of some pests. Suppression can mean either inconsistent control (good to poor), or consistent control at a level below that is generally considered acceptable for commercial control.
- If the maximum season limit of **Sharda Dinotefuran 35%SL**, as defined under crop use directions, has been applied and pest populations require additional treatments, use another registered pesticide that is not in the neonicotinoid class or nitroguanidine subclass of chemistry.

#### Rotational Crops

For all crops other than berry and small fruit (subgroup 13-07F and 13-07H), cucurbits, fruiting vegetables, head & stem brassica, leafy vegetables, bulb onion (subgroup 3-07A), green onion (subgroup 3-07B), peach and nectarine, potato, tuberous and corm vegetables (subgroup 1C), and watercress a 120 day-plant back interval must be observed.

#### Mixing Instructions

Add ½ of the required amount of water to the mix tank. With the agitator running, add the desired amount of **Sharda Dinotefuran 35%SL** to the tank. Continue agitation while adding the remainder of the water. Begin application of the solution after **Sharda Dinotefuran 35%SL** has completely dispersed into the mix water. Maintain agitation until all of the mixture has been applied.

#### APPLICATION PROCEDURES AND SPRAY EQUIPMENT

##### Ground Application

Spray nozzles must be selected which will provide accurate and uniform spray deposition. Use spray nozzles which provide medium



sized droplets and reduce drifts. To help insure accuracy, calibrate sprayer before each use. For information on spray equipment and calibration, consult nozzle manufacturers and/or State and County Extension Service.

Apply **Sharda Dinotefuran 35%SL** using sufficient water volume to provide thorough and uniform coverage. In situations where a dense canopy exists and/or pest pressure is high, use greater water volumes. The use of a spray adjuvant may improve spray coverage. Avoid making applications under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur.

#### **Aerial Application**

Apply **Sharda Dinotefuran 35%SL** in water, using the minimum spray volume indicated in the Special Instructions of each crop, but not less than 3 gallons per acre. Increase sprays volume where practical to improve coverage. Avoid making application under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur.

#### **Application through Irrigation Systems (Chemigation)**

**Sharda Dinotefuran 35%SL** alone or in combination with other products which are registered for application through sprinkler irrigation may be applied through irrigation systems where so noted in the soil application of each crop. **Sharda Dinotefuran 35%SL** may be applied through micro-irrigation (individual spaghetti tube), overhead irrigation, motorized calibrated irrigation equipment, drip or trickle irrigation where so noted in the soil application of each crop, but must NOT be applied through any other type of irrigation system. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service specialist, equipment manufacturers or other experts. **DO NOT** connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place. 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.

**DO NOT APPLY Sharda Dinotefuran 35%SL 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 per year. **Sharda Dinotefuran 35%SL** may be applied through 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 end of the fill pipe and to 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.

#### **Drip or trickle chemigation requirements:**

- The system must be calibrated to uniformly apply the rates specified. If you have questions about calibration, you should contact State Extension Services specialists, equipment manufacturers, or other experts.
- 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 back flow.
- 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 pump 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.
- **DO NOT** apply when wind speed favors drift beyond the area intended.

#### **EQUIPMENT CALIBRATION INSTRUCTIONS**

**Sharda Dinotefuran 35%SL** must be applied under the schedule specified in the specific crop use recommendations, not according to the irrigation schedule, unless the events coincide. In general, set the equipment to apply the minimum amount of water per acre. Run the system at 86 to 90% of the manufacturer's maximum rated travel speed.

The following calibration and application techniques are provided for user reference, but **DO NOT** constitute a warranty of fitness for application through sprinkler irrigation equipment. Users must check with State and local agencies for potential use restrictions before applying any agricultural chemical through sprinkler irrigation equipment.

**Center Pivot Irrigation Equipment:**

- Use only drive systems that provide uniform water distribution.
- **DO NOT** use end guns when chemigating **Sharda Dinotefuran 35%SL** through center pivot systems because of non-uniform application.
- Plug the first nozzle closest to the well head to protect the water source.
- Determine the size of the area to be treated.
- Determine the time required to apply 0.1 – 0.25 inches of water over the area to be treated when the system and injection equipment are operated at normal pressures as recommended by the equipment manufacturer. Run the system at 80-95% of the manufacturer's rated maximum travel speed.
- Using water, determine the injection pump output when operated at normal line pressure.
- Determine the amount of **Sharda Dinotefuran 35%SL**, and any tank mix partners, required to treat the area covered by the irrigation system.
- Add the required amount of **Sharda Dinotefuran 35%SL** and any tank mix partners, and sufficient water to meet the injection time requirements to the solution tanks. (See "Mixing Instructions" section of this label.)
- Make sure the system is fully charged with water before starting injection of the SCOPRION solution. Time the injection to last at least as long as it takes to bring the system to full pressure.
- Maintain constant agitation in the solution tank during the injection period.
- Inject the specified amount of **Sharda Dinotefuran 35%SL** per acre continuously for one complete revolution of the system.
- Stop the injection equipment after treatment is complete. Continue to operate the system until the **Sharda Dinotefuran 35%SL** solution has cleared all of the sprinkler heads.
- Allow time for all lines to flush the pesticide through all nozzles before turning off irrigation water.

**Solid Set, Hand Move and Moving Wheel Irrigation Equipment:**

- Determine the acreage covered by the sprinklers.
- Fill the injector solution tank with plain water and calibrate the flow rate of the system to deliver the contents of the tank over a 20–40-minute time interval.
- Determine the amount of **Sharda Dinotefuran 35%SL** required to treat the area covered by the irrigation system.
- Add the required amount of **Sharda Dinotefuran 35%SL** and any other tank mix partners, into the same quantity of water used to calibrate the injection period. (See "Mixing Instructions" section of this label.)
- Operate the system at the same pressure and time interval established during the calibration.
- Inject specified amount of **Sharda Dinotefuran 35%SL** per acre for either a 20–40-minute period at the end of the regular irrigation set, or as a 20–40-minute injection as a separate application not associated with regular irrigation to maximize retention of the insecticide by the foliage.
- Stop injection equipment after treatment is completed. Continue to operate the system until the **Sharda Dinotefuran 35%SL** solution has cleared the last sprinkler head. To ensure lines are flushed and free from remaining pesticides, a dye indicator may be injected into the lines to mark the end of the application period.

**TANK MIXING INFORMATION**

NOTICE: Tank mixing or use of this product with any other product which is not specifically and expressly authorized by the label shall be the exclusive risk of user, applicator and/or application advisor. Read and follow the entire label of each product to be used in tank mix with this product.

Add ½ of the required amount of water to the mix tank. Start the agitator before adding any tank mix partners. In general, tank mix partners may be added in this order: products packaged in water soluble packaging, wettable powders, wettable granules (dry flowables), liquid flowables, liquids, emulsifiable concentrates, surfactants and adjuvants. Always allow each tank mix partner to become fully dispersed before adding the next product. Provide sufficient agitation while adding the remainder of the water. Maintain agitation until all the mixture has been added.

When using **Sharda Dinotefuran 35%SL** in tank mixtures, all products in water soluble packaging must be added to the tank before any other tank mix partner, including **Sharda Dinotefuran 35%SL**. Allow the water-soluble packaging to completely dissolve and the product(s) to completely disperse before adding any other tank mix partner to the tank.

If using **Sharda Dinotefuran 35%SL** in a tank mixture, observe all directions for use, crops/sites, use rates, dilution ratios, precautions and limitations which appear on the tank mix product label. No label dosage rate may be exceeded, and the most restrictive label precautions and limitations must be followed. This product must not be mixed with any product which prohibits such mixing. Tank



mixtures or other applications of products referenced on this label are permitted only in those states which the referenced products are registered.

### **Compatibility**

**IMPORTANT:** The crop safety of all potential tank mixes on all crops has not been tested. Before applying any tank mixture not specifically recommended on this label, the safety of the target crop must be confirmed.

**Sharda Dinotefuran 35%SL** is compatible with most commonly used pesticides. However, since it is not possible to test all possible mixtures, the user must pretest to assure the physical compatibility and lack of phytotoxic effect of any proposed mixtures with **Sharda Dinotefuran 35%SL**.

To determine the physical compatibility of **Sharda Dinotefuran 35%SL** with other products, use a jar test, as described below:

Using a quart jar, add the proportionate amounts of the products to 1 qt. of water. Add wettable powders and water dispersible granular products first, then liquid flowables and emulsifiable concentrates last. After thoroughly mixing, let stand for at least 5 minutes. If the combination remains mixed or can be remixed readily, it is physically compatible. Once compatibility has been proven, use the same procedure for additional required ingredients to the spray tank.

### **SPRAY DRIFT ADVISORIES**

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS. Avoiding spray drift at the application site is the responsibility of the applicator.

**DO NOT** apply under conditions involving possible drift to food, forage or other plantings that might be damaged or the crop thereof rendered for sale, use or consumption.

### **IMPORTANCE OF DROPLET SIZE**

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

#### **Controlling Droplet Size – Ground Boom**

Volume - Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.

Pressure - Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.

Spray Nozzle - Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

#### **Controlling Droplet Size – Aircraft**

Adjust Nozzles - Follow nozzle manufacturers' recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

#### **BOOM HEIGHT – Ground Boom**

For ground equipment, the boom should remain level with the crop and have minimal bounce.

#### **RELEASE HEIGHT – Aircraft**

Higher release heights increase the potential for spray drift.

### **SHIELDED SPRAYERS**

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

### **TEMPERATURE AND HUMIDITY**

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

### **TEMPERATURE INVERSIONS**

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. 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. Avoid applications during temperature inversions.

**WIND**

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS. Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

**Air Assisted Tree and Vine Sprayers (Berry/Small Fruit and Tuberous/Corm Vegetables only)**

Air assisted tree and vine sprayers carry droplets in the canopy of vines via a radially or laterally directed air stream. In addition to the general drift management principles already described, the following specific practices will further reduce drift potential:

- 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 only enough air volume to penetrate the canopy and provide good coverage. Use a minimum of 50 gallons of finished spray per acre.
- **DO NOT** allow spray to go beyond the edge of the cultivated area. Spray the outside row only from outside the planting.

**MANDATORY SPRAY DRIFT MANAGEMENT****Aerial Applications**

- **DO NOT** release spray at a height greater than 10 ft. above the ground or vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators are required to use a medium or coarser (ASABE S572.1) droplet size.
- **DO NOT** apply when wind speeds exceed 15 mph at the application site. If the windspeed is greater than 10 mph, the boom length must be 65% or less of the wingspan for fixed wing aircraft and 75% or less of the rotor diameter for helicopters. Otherwise, the boom length must be 75% or less of the wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters.
- For aerial applicators, if the windspeed is 10 miles per hour or less, applicators must use ½ swath displacement upwind at the downwind edge of the field. When the windspeed is between 11-15 miles per hour, applicators must use ¾ swath displacement upwind at the downwind edge of the field.
- **DO NOT** apply during temperature inversions.

**Ground Boom Applications**

- User must only apply with the release height recommended by the manufacturer, but no more than 4 feet above the ground or crop canopy.
- Applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- **DO NOT** apply when wind speeds exceed 15 miles per hour at the application site. Do not apply during temperature inversions.

**Boomless Ground Applications**

- Applicators are required to use a medium or coarser droplet size (ASABE S572.1) for all applications.
- **DO NOT** apply when wind speeds exceed 15 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

**CROP-SPECIFIC USE DIRECTIONS****BERRY AND SMALL FRUIT (subgroup 13-07F): SMALL FRUIT VINE CLIMBING (EXCEPT FUZZY KIWI FRUIT)**

CROP	PEST	RATE	USE SPECIFIC INSTRUCTIONS
Amur river grape	Glassy-Winged	<b>FOLIAR:</b> 1.75 to 5.25 fl. oz./A (0.045 to 0.135 lb. a.i./A)	Higher water volumes provide improved insect control.
Gooseberry	Sharpshooter		
Grape	Grape Berry Moth		Begin applications when first pest activity is noticed or when
Kiwifruit, hardy	(first and second		insects reach threshold levels per State and County Extension
Maypop	generation only)		Service recommendations. Repeat as needed to maintain control,
Schisandra berry	Leafhoppers		but not more often than every 14 days. For best results, time
	Mealybug		application before a damaging population becomes established.
Cultivars, Varieties and/or	Multicolored Asian Lady		
hybrids of these	Beetle		Under severe pest pressure, use the higher specified rates.
	Thrips		

	Glassy-Winged Sharpshooter Grape Phylloxera (suppression only) Leafhoppers Mealy bug Thrips Vine Mealybug	<b>SOIL:</b> 9 to 13.25 fl. oz./A (0.225 to 0.338 lb. a.i./A)	For Mealybug control, apply between budbreak and pea-berry size.  The rate applied affects the length of control. Use the high rate where infestations occur later in crop development, or where pest pressure is continuous.  <b>Sharda Dinotefuran 35%SL</b> can be mixed and/or alternated with commonly used insecticides, such as <i>Danitol</i> or <i>Knack</i> , for better knockdown and/or improved control of pests.
--	--	---	--

**Precautions and Restrictions**

Regardless of application method and product, **DO NOT** apply more than a total of 0.54 lbs. of dinotefuran products per acre per calendar year.

**Foliar Application:**

- Apply with air or ground equipment in adequate water for uniform coverage (5 to 10 gals/A by air or 50 to 300 gals/A by ground).
- **DO NOT** apply **Sharda Dinotefuran 35%SL** within one (1) day of harvest.
- **DO NOT** apply more than a total of 10.5 fl. oz./A of Dinotefuran 35%SL (0.270 lb. a.i.) per acre per calendar year.

**Soil Application:**

- Make only one (1) soil application per calendar year.
- Apply with ground equipment in adequate water for uniform coverage (10 to 100 gals/A).
- **DO NOT** apply **Sharda Dinotefuran 35%SL** within twenty-eight (28) days of harvest.
- **DO NOT** apply more than a total of 13.25 fl. oz./A of Dinotefuran 35%SL (0.338 lb. a.i.) per acre per calendar year.
- For drip application, prior to injection, mix specified dosage in sufficient carrier volume (minimum of 2 gals of water per 1 lb of product) to ensure uniform application and incorporation into the soil using drip or trickle irrigation water. Apply towards the end of the irrigation run to ensure the product does not leach past the root zone.

**BERRY AND SMALL FRUIT (subgroup 13-07F): LOW GROWING BERRY SUBGROUP (EXCEPT STRAWBERRY)**

CROP	PEST	RATE	USE SPECIFIC INSTRUCTIONS
Bearberry Bilberry Blueberry Lowbush Cloudberry Cranberry Lingonberry Muntries Partridgeberry Cultivars, varieties and/or hybrids of these	Blackheaded Fireworm (suppression only) Cranberry Fruitworm (suppression only) Cranberry Weevil (suppression only) Flea Beetles Leafhoppers Spanworm (suppression only) Sparganothis Fruitworm (suppression only) Stinkbugs Tipworm (suppression only)	<b>FOLIAR:</b> 3.5 to 7 fl. oz./A (0.090 to 0.180 lb. a.i./A)	Higher water volumes provide improved insect control.  Begin applications when first pest activity is noticed or when insects reach threshold levels per State and County Extension Service recommendations. Repeat as needed to maintain control, but not more often than every 14 days. For best results, time application before a damaging population becomes established.  Under severe pest pressure, use the higher specified rates.  The rate applied affects the length of control. Use the high rate where infestations occur later in crop development, or where pest pressure is continuous.  <b>Sharda Dinotefuran 35%SL</b> can be mixed and/or alternated with commonly used insecticides, such as <i>Knack</i> , to improve length of control and/or achieve better knockdown of pests.

**Precautions and Restrictions**

- Apply with air or ground equipment in adequate water for uniform coverage (Use a minimum of 5 gals/A for air or 30 gals/A for ground applications).
- **DO NOT** apply **Sharda Dinotefuran 35%SL** within seven (7) days of harvest.
- **DO NOT** apply more than a total of 14 fl. oz./A of Dinotefuran 35%SL (0.360 lb. a.i.) per acre per calendar year.
- Regardless of application method or product, **DO NOT** apply more than a total 0.54 lbs. of Dinotefuran per acre per calendar year.

**CUCURBITS**

CROP	PEST	RATE	USE SPECIFIC INSTRUCTIONS
Acorn Squash	Brown Marmorated	<b>FOLIAR:</b>	Higher water volumes provide improved insect control.
Balsam Apple	Stink Bug	2 to 7 fl. oz./A	
Balsam Pear	Brown Stink Bug	0.05 to 0.18 lb.	Begin application when pest activity is first noticed or when insects reach threshold levels per State and County Extension Service recommendations. Repeat as needed to maintain control, but not more often than every 7 days. For best results, time application before a damaging population becomes established.
Bitter Melon	Cabbage Looper	a.i./A	
Butternut Squash	Cucumber Beetle spp	<b>OR</b>	
Cantaloupe	Flea Beetle spp		
Casaba	Grasshopper spp	<b>SOIL:</b>	
Chayote	Green Peach	9 to 10.5 fl. oz./A	Under severe pest pressure, use higher specified rates.
Chinese Cucumber	Aphid	0.23 to 0.27 lb.	
Chinese Okra	Green Stink Bug	a.i./A	The rate applied affects the length of control. Use high rate where infestations occur later in crop development, or where pest pressure is continuous.
Chinese Waxgourd (Chinese Preserving Melon)	Harlequin Bug		<b>Sharda Dinotefuran 35%SL</b> may be mixed and/or alternated with commonly used insecticides to comply with local IPM and resistance management programs.
Citron Melon	Melon Aphid		
Crenshaw Melon	Leafhopper spp		Apply specified dosage in sufficient carrier volume to ensure uniform application and incorporate into the soil using one of the following methods:
Crookneck Squash	Leafminer spp		1. In a narrow band centered on the plant row in the bedding operation just prior to planting. For best results band width must be 2" or less and placed 1 to 2" below the seed depth.
Cucumber	Southern Green Stink Bug		2. In-furrow spray at or below seed level or a narrow surface band above the seedline during planting. For surface banded applications incorporate to a depth of 1-1/2" with sufficient irrigation within 24 hours to insure satisfactory insect control.
Edible Gourd	Spotted Cucumber Beetle		3. As a post-seeding drench, transplant drench or hill drench. Make applications with sufficient water to insure incorporation into the root zone.
Gherkin	Squash Bug		4. As a sidedress after plants are established. Make applications within 2 to 4" to the side of each row and incorporated 1 or more inches deep. Applications must be made to each row if there are two rows per bed.
Golden Pershaw Melon	Striped Cucumber Beetle		5. In drip or trickle irrigation water.
Honey Balls	Thrips spp		
Honeydew Melon	Whitefly spp		
Mango Melon	(including		
Momordica	Bandwinged		
spp. Muskmelon	Whitefly, Silverleaf		
Persian Melon	Whitefly, and		
Pineapple Melon	Sweetpotato		
Pumpkin	Whitefly)		
Santa Claus Melon			
Scallop			
Squash			
Snake Mellon			
Spaghetti Squash			
Straightneck Squash			
Summer Squash			
True Cantaloupe			
Vegetable Marrow			
Watermelon			
Winter Squash			
Zucchini			

**Precautions and Restrictions**

- **DO NOT** apply to vegetables grown for seed. **DO NOT** combine foliar applications with soil application, or vice versa. Only use one application method.
- Regardless of application method or product, **DO NOT** apply more than a total 0.54 lbs. of Dinotefuran per acre per calendar year.

**Foliar Application:**

- Apply with air or ground equipment in adequate water for uniform coverage (**DO NOT** use less than 3 gallons/acre for aerial application or 20 gallons/acre for ground applications).
- **DO NOT** apply **Sharda Dinotefuran 35%SL** within one (1) day of harvest.
- **DO NOT** apply more than a total of 10.5 fl. oz./A of Dinotefuran 35%SL (0.266 lb. a.i./A) per calendar year.

**Soil Application:**

- See conversion chart on this label for linear application rates.
- Apply with ground equipment in adequate water for uniform coverage (10 to 100 gals/A).
- **DO NOT** apply **Sharda Dinotefuran 35%SL** within twenty-one (21) days of harvest.
- **DO NOT** apply more than a total of 21 fl. oz./A of Dinotefuran 35%SL (0.532 lb. a.i./A) per calendar year.

**FRUITING VEGETABLES**

CROP	PEST	RATE	USE SPECIFIC INSTRUCTIONS
Bell Pepper Chili Pepper Cooking Pepper Eggplant Ground Cherry Pepino Pimento Sweet Pepper Tomatillo Tomato	Brown Marmorated Stink Bug Brown Stink Bug Cabbage Looper Colorado Potato Beetle Conspense Stink Bug Cucumber Beetle spp Flea Beetle spp Grasshopper spp Green Peach Aphid Green Stink Bug Harlequin Bug Leafhopper spp Leafminer spp Pepper Weevil Psyllid spp. (including Potato Psyllid) Potato Aphid Southern Green Stink Bug Squash Bug Thrips spp (including Eastern Flower Thrips, Onion Thrips, Tobacco Thrips, and Western Flower Thrips) Whitefly spp (including Bandwinged Whitefly, Silverleaf Whitefly, and Sweetpotato Whitefly)	<b>FOLIAR:</b> 2 to 7 fl. oz./A 0.05 to 0.18 lb. a.i./A  <b>OR</b>  <b>SOIL:</b> 9 to 10.5 fl. oz./A 0.23 to 0.27 lb. a.i./A	Higher water volumes provide improved insect control.  Begin application when pest activity is first noticed or when insects reach threshold levels per State and County Extension Service recommendations. Repeat as needed to maintain control, but not more often than every 7 days. For best results, time application before a damaging population becomes established.  Under severe pest pressure, use higher specified rates.  The rate applied affects the length of control. Use high rate where infestations occur later in crop development, or where pest pressure is continuous.  <b>Sharda Dinotefuran 35%SL</b> may be mixed and/or alternated with commonly used insecticides to comply with local IPM and resistance management programs.  Apply specified dosage in sufficient carrier volume to insure uniform application and incorporate into the soil using one of the following methods: 1. In a narrow band centered on the plant row in the bedding operation just prior to planting. For best results band width must be 2" or less and placed 1 to 2" below the seed depth. 2. In-furrow spray at or below seed level or a narrow surface band above the seedline during planting. For surface banded applications incorporate to a depth of 1-1/2" with sufficient irrigation within 24 hours to insure satisfactory insect control. 3. As a post-seeding drench, transplant drench or hill drench. Make applications with sufficient water to insure incorporation into the root zone. 4. As a sidedress after plants are established. Applications must be placed within 2 to 4" to the side of each row and incorporated 1 or more inches deep. Applications must be made to each row if there are two rows per bed. 5. In drip or trickle irrigation water.

**Precautions and Restrictions**

- **DO NOT** apply to vegetables grown for seed. **DO NOT** combine foliar applications with soil application, or vice versa. Only use one application method.
- Regardless of application method or product, **DO NOT** apply more than a total 0.54 lbs. of Dinotefuran per acre per calendar year.

**Foliar Application:**

- Apply with air or ground equipment in adequate water for uniform coverage (**DO NOT** use less than 3 gallons/acre for aerial application or 20 gallons/acre for ground applications).
- **DO NOT** apply Dinotefuran 35%SL within one (1) day of harvest.
- **DO NOT** apply more than a total of 10.5 fl. oz./A of Dinotefuran 35%SL (0.266 lb. a.i./A) per calendar year.

**Soil Application:**

- See conversion chart on this label for linear application rates.
- Apply with ground equipment in adequate water for uniform coverage (10 to 100 gals/A).
- **DO NOT** apply **Sharda Dinotefuran 35%SL** within twenty-one (21) days of harvest.
- **DO NOT** apply more than a total of 21 fl. oz./A of Dinotefuran 35%SL (0.532 lb. a.i./A) per calendar year.

**GRAPES**

<b>CROP</b>	<b>PEST</b>	<b>RATES</b>	<b>USE SPECIFIC INSTRUCTIONS</b>
Grapes	Brown Marmorated Stink Bug Flea Beetle spp Glassy-Winged Sharpshooter Grape Berry Moth Japanese Beetle Leafhopper spp Mealybug spp (including Citrus Mealybug, Grape Mealybug, Longtailed Mealybug, Obscure Mealybug, and Vine Mealybug) Multicolored Asian Lady Beetle Thrips spp Whitefly spp (including Bandwinged Whitefly, Silverleaf Whitefly, and Sweetpotato Whitefly)	<b>FOLIAR:</b> 2 to 5 fl. oz./A 0.05 to 0.13 lb. a.i./A	<p>Higher water volumes provide improved insect control.</p> <p>Begin application when pest activity is first noticed or when insects reach threshold levels per State and County Extension Service recommendations. Repeat as needed to maintain control, but not more often than every 7 days. For best results, time application before a damaging population becomes established.</p> <p>Under severe pest pressure, use higher specified rates. The rate applied affects the length of control. Use high rate where infestations occur later in crop development, or where pest pressure is continuous.</p> <p><b>Sharda Dinotefuran 35%SL</b> may be mixed and/or alternated with commonly used insecticides to comply with local IPM and resistance management programs.</p>
	Brown Marmorated Stink Bug Flea Beetle spp Glassy-Winged Sharpshooter Leafhopper spp Mealybug spp (including Citrus Mealybug, Grape Mealybug, Longtailed Mealybug, Obscure Mealybug, and Vine Mealybug) Phylloxera spp. Thrips spp Whitefly spp (including Bandwinged Whitefly, Silverleaf Whitefly, and Sweetpotato Whitefly)	<b>SOIL:</b> 9 to 10.5 fl. oz./A 0.23 to 0.27 lb. a.i./A	



**Precautions and Restrictions**

- Regardless of application method or product, **DO NOT** apply more than a total of 0.54 lbs. of Dinotefuran per acre per calendar year.

**Foliar Application:**

- Apply with air or ground equipment in adequate water for uniform coverage (**DO NOT** use less than 5 gallons/acre for aerial applications or 10 gallons/acre for ground applications).
- **DO NOT** apply Dinotefuran 35%SL within one (1) day of harvest.
- **DO NOT** apply more than a total of 10.25 fl. oz./A of Dinotefuran 35%SL (0.259 lb. a.i./A) per calendar year.

**Soil Application:**

- Make only one (1) soil application per calendar year.
- Apply with ground equipment in adequate water for uniform coverage (10 to 100 gals/A).
- **DO NOT** apply Dinotefuran 35%SL within twenty-eight (28) days of harvest.
- **DO NOT** apply more than a total of 10.5 fl. oz./A of Dinotefuran 35%SL (0.266 lb. a.i./A) per calendar year.
- For drip application, prior to injection, mix specified dosage in sufficient carrier volume (minimum of 2 gals of water per 1 lb. of product) to ensure uniform application and incorporation into the soil using drip or trickle irrigation water. Apply towards the end of the irrigation run to ensure the product does not leach past the root zone.

**HEAD AND STEM BRASSICA**

CROP	PEST	RATE	USE SPECIFIC INSTRUCTIONS
Broccoli Brussel Sprouts Cabbage Cauliflower Cavalo Broccolo Chinese Cabbage Chinese Mustard Cabbage Kohlrabi	Brown Stink Bug Cabbage Aphid Cabbage Looper Cucumber Beetle spp Flea Beetle spp Grasshopper spp Green Peach Aphid Green Stink Bug Harlequin Bug Leafminer spp Southern Green Stink Bug Squash Bug Thrips spp (including Onion Thrips) Whitefly spp (including Bandwinged Whitefly, Silverleaf Whitefly, and Sweetpotato Whitefly)	<b>FOLIAR:</b> 2 to 7 fl. oz./A 0.05 to 0.18 lb. a.i./A  OR <b>SOIL:</b> 9 to 10.5 fl. oz./A 0.23 to 0.27 lb. a.i./A	Higher water volumes provide improved insect control.  Begin application when pest activity is first noticed or when insects reach threshold levels per State and County Extension Service recommendations. Repeat as needed to maintain control, but not more often than every 7 days. For best results, time application before a damaging population becomes established.  Under severe pest pressure, use higher specified rates.  The rate applied affects the length of control. Use high rate where infestations occur later in crop development, or where pest pressure is continuous.  <b>Sharda Dinotefuran 35%SL</b> may be mixed and/or alternated with commonly used insecticides to comply with local IPM and resistance management programs.  Apply specified dosage in sufficient carrier volume to insure uniform application and incorporate into the soil using one of the following methods: <ol style="list-style-type: none"> <li>1. In a narrow band centered on the plant row in the bedding operation just prior to planting. For best results band width must be 2" or less and placed 1 to 2" below the seed depth.</li> <li>2. In-furrow spray at or below seed level or a narrow surface band above the seedline during planting. For surface banded applications incorporate to a depth of 1-1/2" with sufficient irrigation within 24 hours to insure satisfactory insect control.</li> <li>3. As a post-seeding drench, transplant drench or hill drench. Make applications with sufficient water to insure incorporation into the root zone.</li> <li>4. As a sidedress after plants are established. Applications must be placed within 2 to 4" to the side of each row and incorporated 1 or more inches deep. Applications must be made to each row if there are two rows per bed.</li> <li>5. In drip or trickle irrigation water.</li> </ol>

**Precautions and Restrictions**

- **DO NOT** apply to vegetables grown for seed. **DO NOT** combine foliar applications with soil application, or vice versa. Only use one application method.
- Regardless of application method or product, **DO NOT** apply more than a total 0.54 lbs. of Dinotefuran per acre per calendar year.

**Foliar Application:**

- Apply with air or ground equipment in adequate water for uniform coverage (**DO NOT** use less than 3 gallons/acre for aerial application or 20 gallons/acre for ground applications).
- **DO NOT** apply **Dinotefuran 35%SL** within one (1) day of harvest.
- **DO NOT** apply more than a total of 10.5 fl. oz./A of Dinotefuran 35%SL (0.266 lb. a.i./A) per calendar year.

**Soil Application:**

- See conversion chart on this label for linear application rates.
- Apply with ground equipment in adequate water for uniform coverage (10 to 100 gals/A).
- **DO NOT** apply **Dinotefuran 35%SL** within twenty-one (21) days of harvest.
- **DO NOT** apply more than a total of 21 fl. oz./A of Dinotefuran 35%SL (0.532 lb. a.i./A) per calendar year.

**LEAFY VEGETABLES (EXCEPT BRASSICA VEGETABLES)**

CROP	PEST	RATE	USE SPECIFIC INSTRUCTIONS
Amaranth (Chinese Spinach)	Brown Stink Bug	<b>FOLIAR:</b> 2 to 5.25 fl. oz./A 0.05 to 0.13 lb. a.i./A  OR  <b>SOIL:</b> 9 to 10.5 fl. oz./A 0.23 to 0.27 lb. a.i./A	Higher water volumes provide improved insect control.
Arugula (Roquette)	Cabbage Looper		Begin application when pest activity is first noticed or when insects reach threshold levels per State and County Extension Service recommendations. Repeat as needed to maintain control, but not more often than every 7 days. For best results, time application before a damaging population becomes established.
Cucurbit (Cucumber)	Cucumber Beetle		
Cardoon	Flea Beetle spp		
Celery	Grasshopper spp		
Celtuce	Green Peach Aphid		
Chervil	Green Stink Bug		
Chinese Celery	Harlequin Bug		
Chrysanthemum	Leafhopper spp		
Edible-leaved	Leafminer		
Garland	Leafminer spp		
Corn Salad	Potato Aphid	Under severe pest pressure, use higher specified rates.	The rate applied affects the length of control. Use high rate where infestations occur later in crop development, or where pest pressure is continuous.
Cress	Southern Green		
Garden	Stink Bug		
Upland	Squash Bug		
Dandelion	Thrips spp (including		
Dock (Sorrel)	Western Flower		
Endive (Escarole)	Thrips)		
Florence Fennel	Whitefly spp (including		
Lettuce	Bandwinged		
Head	Whitefly, Silverleaf		
Leaf	Whitefly, and	<b>Sharda Dinotefuran 35%SL</b> may be mixed and/or alternated with commonly used insecticides to comply with local IPM and resistance management programs.	Apply specified dosage in sufficient carrier volume to insure uniform application and incorporate into the soil using one of the following methods:  1. In a narrow band centered on the plant row in the bedding operation just prior to planting. For best results band width must be 2" or less and placed 1 to 2" below the seed depth.  2. In-furrow spray at or below seed level or a narrow surface band above the seedline during planting. For surface banded applications incorporate to a depth of 1-1/2" with sufficient irrigation within 24 hours to insure satisfactory insect control.  3. As a post-seeding drench, transplant drench or hill drench. Make applications with sufficient water to insure incorporation into the root zone.  4. As a sidedress after plants are established. Applications must be placed within 2 to 4" to the side of each row and incorporated 1 or more inches deep. Applications must be made to each row if there are two rows per bed.  5. In drip or trickle irrigation water.
Orach	Sweetpotato		
Parsley	Whitefly)		
Purslane			
Garden			
Winter			
Radicchio (Red Chicory)			
Rhubarb			
Spinach			
Spinach, New Zealand			
Spinach, Vine			
Swiss Chard			

**Precautions and Restrictions**

- **DO NOT** apply to vegetables grown for seed. **DO NOT** combine foliar applications with soil application, or vice versa. Only use one application method.
- Regardless of application method or product, **DO NOT** apply more than a total 0.54 lbs. of Dinotefuran per acre per calendar year.

**Foliar Application:**

- Apply with air or ground equipment in adequate water for uniform coverage (**DO NOT** use less than 3 gallons/acre for aerial applications or 20 gallons/acre for ground applications).
- **DO NOT** apply **Sharda Dinotefuran 35%SL** within seven (7) days of harvest.
- **DO NOT** apply more than a total of 10.5 fl. oz./A of Dinotefuran 35%SL (0.266 lb. a.i./A) per calendar year.

**Soil Application:**

- See conversion chart on this label for linear application rates.
- Apply with ground equipment in adequate water for uniform coverage (10 to 100 gals/A).
- **DO NOT** apply **Sharda Dinotefuran 35%SL** within twenty-one (21) days of harvest.
- **DO NOT** apply more than a total of 21 fl. oz./A of Dinotefuran 35%SL (0.532 lb. a.i./A) per calendar year.

**ONION, BULB AND GREEN (SUBGROUPS 3-07A AND 3-07B)**

CROP	PEST	RATE	USE SPECIFIC INSTRUCTIONS
Bulb onion, includes: Daylily, bulb Fritillaria, bulb Garlic, bulb Garlic, Great-headed, bulb Garlic, serpent, bulb Lily, bulb Onion, bulb Onion, Chinese, Bulb Onion, pearl Onion, potato, bulb Shallot, bulb Cultivars, varieties and/or hybrids of these	Flea Beetles	<b>FOLIAR:</b>	Higher water volumes provide improved insect control.
	Grasshoppers	3.5 to 7 fl. oz./A	Begin applications when first pest activity is noticed or when insects reach threshold levels per State and County Extension Service recommendations. Repeat as needed to maintain control, but not more often than every 7 days. For best results, time application before a damaging population becomes established. Under severe pest pressure, use the higher specified rates.  The rate applied affects the length of control. Use the high rate where infestations occur later in crop development, or where pest pressure is continuous.  <b>Sharda Dinotefuran 35%SL</b> can be mixed and/or alternated with commonly used insecticides to improve the length of control and/or achieve better knockdown of pests  Apply specified dosage in sufficient carrier volume to ensure uniform application and incorporate into the soil using one of the following methods: 1. In a narrow band centered on the plant row in the bedding operation just prior to planting. For best results band width should be 2" or less and placed 1 to 2" below the seed depth. 2. In-furrow spray at or below seed level or a narrow surface band above the seedline during planting. For surface-banded applications incorporate to a depth of 1-1/2" with sufficient irrigation within 24 hours to insure satisfactory insect control. 3. As a post-seeding drench, transplant drench or hill drench. Applications should be made with sufficient water to insure incorporation into the root zone. 4. As a sidedress immediately after transplanting operations are finished. Applications should be placed within 2 to 4" to the side of each row and incorporated 1 or more inches deep. Applications should be made to each row if there are two rows per bed. 5. In drip or trickle irrigation water immediately after transplanting.
	Leafhoppers	(0.090 to 0.180 lb. a.i./A)	
	Stink bugs	<b>FOLIAR:</b>	
	Leafminers	5.25 to 7 fl. oz./A	
	Thrips	(0.135 to 0.180 lb. a.i./A)	
	Whiteflies		
	Leafminers	<b>SOIL:</b>	
	Thrips	8.75 to 10.5 fl. oz./A	
	Whiteflies	(0.225 to 0.270 lb. a.i./A)	
Green onion, includes: Chive, fresh leaves Chive, Chinese, fresh leaves Elegans hosta Fritillaria leaves Kurrat Leady's leek Leek Leek, wild Onion, Beltsville bunching Onion, fresh Onion, green Onion, macrostem Onion, tree, tops Onion, Welsh, tops Shallot, fresh leaves Cultivars, varieties and/or hybrids of these			

**Precautions and Restrictions**

- Regardless of application method or product, **DO NOT** apply more than a total of 0.54 lbs. of Dinotefuran per acre per calendar year.

**Foliar Application:**

- Apply with air or ground equipment in adequate water for uniform coverage (A minimum of 5 gals/A by air or 20 gals/A by ground).
- DO NOT** apply **Dinotefuran 35%SL** within one (1) day of harvest.
- DO NOT** apply more than a total of 10.5 fl. oz./A of Dinotefuran 35%SL (0.270 lb. a.i.) per acre per calendar year.

**Soil Application:**

- See conversion chart for linear application plant application rates.
- Apply with ground equipment in adequate water for uniform coverage (A minimum of 10 gals/A).
- Apply **Dinotefuran 35%SL** at planting or immediately after transplanting.
- DO NOT** apply more than a total of 10.5 fl. oz./A of Dinotefuran 35%SL (0.270 lb. a.i.) per acre per calendar year.

**PEACH AND NECTARINE**

CROP	PEST	RATE	USE SPECIFIC INSTRUCTIONS
Peach Nectarine	Aphids (suppression only)	<b>FOLIAR:</b>	Higher water volumes provide improved insect control.
	Sharpshooters	3.5 to 7 fl. oz./A (0.090 to 0.180 lb. a.i./A)	Begin applications when first pest activity is noticed or when insects reach threshold levels per State and County Extension Service recommendations. Repeat as needed to maintain control, but not more often than every 7 days. For best results, time application before a damaging population becomes established.
	Leafhoppers		
	Peach tree borer	<b>FOLIAR:</b>	Under severe pest pressure, use the higher specified rates.
	Plum curculio	5.25 to 7 fl. oz./A (0.135 to 0.180 lb. a.i./A)	The rate applied affects the length of control. Use the high rate where infestations occur later in crop development, or where pest pressure is continuous.
	Aphids (suppression only)		<b>Sharda Dinotefuran 35%SL</b> applied foliar can be mixed and/or alternated with commonly used insecticides to improve length of control and/or achieve better knockdown of pests.
	Stinkbugs		Apply specified dosage in sufficient carrier volume to ensure uniform application and distribution within and around the root zone of each tree using one of the following methods:
	Aphids (suppression only)	<b>SOIL:</b>	1. As a drench. Applications should be made with sufficient water to insure incorporation into the root zone.
	Sharpshooters	10.5 fl. oz./A (0.270 lb. a.i./A)	2. Using drip, trickle, micro sprinkler or any customized irrigation system derived from those systems to water trees independently.
	Leafhoppers		
	Peach tree borer		

**Precautions and Restrictions**

- Regardless of application method or product, **DO NOT** apply more than a total of 0.54 lbs. of all dinotefuran per acre per calendar year.

**Foliar Application:**

- Apply with air or ground equipment in adequate water for uniform coverage (A minimum of 5 gals/A by air or 50 gals/A by ground).
- DO NOT** apply **Sharda Dinotefuran 35%SL** within three (3) days of harvest.
- DO NOT** apply more than a total of 10.5 fl. oz./A of Dinotefuran 35%SL (0.270 lb. a.i.) per acre per calendar year.
- Interval between applications cannot be less than 7 days.

**Soil Application:**

- DO NOT** apply **Sharda Dinotefuran 35%SL** within twenty one (21) days of harvest
- Apply with ground equipment in adequate water for uniform coverage (A minimum of 100 gals/A).
- DO NOT** apply more than a total of 10.5 fl. oz./A of Dinotefuran 35%SL (0.270 lb. a.i.) per acre per calendar year.

**TUBEROUS AND CORM VEGETABLES (subgroup 1C)**

CROP	PEST	RATE	USE SPECIFIC INSTRUCTIONS
Arracacha	Colorado Potato Beetle	<b>FOLIAR:</b>	Higher water volumes provide improved insect control.
Arrowroot	Flea Beetle	2 to 2.75 fl. oz./A	Begin applications when first pest activity is noticed or when insects reach threshold levels per State and County Extension Service Recommendations Repeat as needed to maintain control, but not more often than every 14 days. For best results, time application before a damaging population becomes established.
Artichoke,	Green Peach Aphid	(0.045 to 0.068 lb. a.i./A)	
Chinese Artichoke,	(suppression only)		
Jerusalem Canna,	Potato Aphid		
edible Cassava, bitter	(suppression only)		
and	Potato Leafhopper		
sweet	Psyllid		
Chayote (root)			

Chufa Dasheen (taro) Ginger Leren Potato Sweet Potato Tanier Turmeric Yam bean Yam, true	Colorado Potato Beetle Flea Beetle Green Peach Aphid (suppression only) Potato Aphid (suppression only) Leafhoppers Psyllid spp. (suppression only)	<b>SOIL:</b> 11.5 to 13.25 fl. oz./A (0.293 to 0.338 lb. a.i./A)	Under severe pest pressure, use the higher specified rates.  The rate applied affects the length of control. Use the high rate where infestations occur later in crop development, or where pest pressure is continuous.  <b>Sharda Dinotefuran 35%SL</b> can be mixed and/or alternated with other insecticides registered for this use for better knockdown and/or improved control of pests.  <b>Aphids: Sharda Dinotefuran 35%SL</b> provides only suppression of established or heavy aphid populations. Control may require use of tank mixes with other labeled insecticides.  Apply specified dosage in sufficient carrier volume to insure uniform application and incorporate into the soil using one of the following methods: <ol style="list-style-type: none"> <li>1. In a narrow band centered on the plant row in the bedding operation just prior to planting.</li> <li>2. In-furrow spray at planting. Direct spray in the furrow on the seed pieces or potatoes.</li> <li>3. As a sidedress to both sides of the row or as a spray at ground crack directly over the row during hilling. Cover immediately with soil.</li> </ol>
--	---	---	---

**Precautions and Restrictions**

- **DO NOT** combine foliar applications with soil applications, or vice versa. Only use one application method.
- Regardless of application method or product, **DO NOT** apply more than a total 0.54 lbs. of Dinotefuran per acre per calendar year.

**Foliar Application:**

- Apply with air or ground equipment in adequate water for uniform coverage (3 to 10 gals/A by air or 10 to 50 gals/A by ground).
- **DO NOT** apply **Sharda Dinotefuran 35%SL** within seven (7) days of harvest.
- **DO NOT** apply more than a total of 8 fl. oz./A of Dinotefuran 35%SL (0.203 lb. a.i.) per acre per calendar year.

**Soil Application:**

- See conversion chart for linear application plant application rates.
- Apply with ground equipment in adequate water for uniform coverage (10 to 100 gals/A).
- Apply once at preplant, preemergence or at ground crack as directed below.
- **DO NOT** apply more than a total of 13.25 fl. oz./A of Dinotefuran 35%SL (0.338 lb. a.i.) per acre per calendar year.

**WATERCRESS**

CROP	PEST	RATE	USE SPECIFIC INSTRUCTIONS
Watercress	Cucumber beetle Sharpshooters Leafhoppers Flea beetles	<b>FOLIAR:</b> 3.5 to 7 fl. oz./A (0.090 to 0.180 lb. a.i./A)	Higher water volumes provide improved insect control.  Begin applications when first pest activity is noticed or when insects reach threshold levels per State and County Extension Service recommendations. Repeat as needed to maintain control, but not more often than every 7 days. For best results, time application before a damaging population becomes established.
	Aphids (suppression only) Stinkbugs Whiteflies Thrips	<b>FOLIAR:</b> 5.25 to 7 fl. oz./A (0.135 to 0.180 lb. a.i./A)	Under severe pest pressure, use the higher specified rates.  The rate applied affects the length of control. Use the high rate where infestations occur later in crop development, or where pest pressure is continuous.  <b>Sharda Dinotefuran 35%SL</b> can be mixed and/or alternated with commonly used Insecticides for better knockdown and/or improved control of pests.



**Precautions and Restrictions**

- Apply with air or ground equipment in adequate water for uniform coverage (5 to 10 gals/A by air or 50 to 300 gals/A by ground).
- **DO NOT** apply **Sharda Dinotefuran 35%SL** within one (1) day of harvest.
- Interval between application cannot be less than 7 days
- **DO NOT** apply more than a total of 14 fl. oz./A of Dinotefuran 35%SL (0.360 lb. ai) per acre per calendar year.
- Regardless of application method or product, **DO NOT** apply more than a total 0.54 lbs. of Dinotefuran per acre per calendar year.

**CONVERSION CHART FOR LINEAR APPLICATION**

Rate/A of Product (fl. oz.)								
	20	24	28	30	32	34	36	40
	Fluid Ounces Product/1000 Row Ft.							
9	0.34	0.41	0.48	0.52	0.55	0.59	0.62	0.69
9.5	0.36	0.44	0.51	0.55	0.58	0.62	0.65	0.73
10	0.38	0.46	0.54	0.57	0.61	0.65	0.69	0.77
10.5	0.40	0.48	0.56	0.60	0.64	0.68	0.72	0.80
11	0.42	0.51	0.59	0.63	0.67	0.72	0.76	0.84
11.5	0.44	0.53	0.62	0.66	0.70	0.75	0.79	0.88
12	0.46	0.55	0.64	0.69	0.73	0.78	0.83	0.92
12.5	0.48	0.57	0.67	0.72	0.77	0.81	0.86	0.96
13	0.50	0.60	0.70	0.75	0.80	0.85	0.90	0.99

**STORAGE AND DISPOSAL**

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

**PESTICIDE STORAGE:** Store this product in a cool, dry place in its original container only. **DO NOT** store this product near fertilizers, seeds, or other pesticides. If this product is spilled, sweep up the spillage and dispose pursuant to the below Pesticide Disposal instructions.

**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 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 ¼ 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 or by incineration.]

**[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.]

**[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 incineration, 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.]

[OPTIONAL MARKETING LANGUAGE]

1	<div><div>www.shardausa.com</div><div></div><div>[ ]</div></div>
2	[Handle with Care]
3	[This side Up]
4	<div><div>{The below graphic to be added to box if formulated in the United States}</div><div></div><div>[ ]</div></div>