



U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs  
Registration Division (7505P)  
1200 Pennsylvania Ave., N.W.  
Washington, D.C. 20460

EPA Reg. Number:

83529-148

Date of Issuance:

1/11/22

NOTICE OF PESTICIDE:

Registration  
 Reregistration  
(under FIFRA, as amended)

Term of Issuance:

Conditional

Name of Pesticide Product:

SHARDA INDOXACARB 30%  
WDG

Name and Address of Registrant (include ZIP Code):

Sharda USA LLC  
c/o Wagner Regulatory Associates, Inc.  
P. O. Box 640  
Hockessin, DE 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.

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 conditionally registered in accordance with FIFRA section 3(c)(7)(A). You must comply with the following conditions:

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

Signature of Approving Official:

For:  
Marion J. Johnson, Acting Product Manager 10  
Invertebrate and Vertebrate Branch 2  
Registration Division (7505P)

Date:

1/11/22

2. You are required to comply with the data requirements described in the DCI identified below:
  - a. Indoxacarb GDCI-067710-1382

You must comply with all of the data requirements within the established deadlines. If you have questions about the Generic DCI listed above, you may contact the Chemical Review Manager in the Pesticide Reevaluation Division: <http://iaspub.epa.gov/apex/pesticides/f?p=chemicalsearch:1>

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 the Federal Insecticide Fungicide and Rodenticide Act 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) list 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 you fail to satisfy these data requirements, EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is attached for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 08/25/2020

If you have any questions, please contact David Gardner by phone at (202) 566-2677, or via email at [gardner.david@epa.gov](mailto:gardner.david@epa.gov).

Attachment

[MASTER LABEL]

INDOXACARB	GROUP	<b>22A</b>	INSECTICIDE
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# Sharda Indoxacarb 30% WDG

## ABN: COMBER

[Dispersible Granules]

**ACTIVE INGREDIENT:****WT. BY %**

Indoxacarb: (S)-methyl 7-chloro-2,5-dihydro-2-[[[(methoxycarbonyl)[4-(trifluoromethoxy)phenyl]amino]carbonyl]indeno[1,2-e][1,3,4]oxadiazine-4a(3H)-carboxylate .....	30.0%
<b>OTHER INGREDIENTS:</b> .....	70.0%
<b>TOTAL:</b> .....	<b>100.0%</b>

### 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	
<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>IF ON SKIN OR CLOTHING:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF IN EYES:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF INHALED:</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
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 <b>1-800-222-1222</b> .	

[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].]

EPA Reg. No. 83529-148

EPA Est. No. XXXXX-XX-XXX

Manufactured for:

**Sharda USA LLC**

7217 Lancaster Pike, Suite A  
Hockessin, Delaware 19707**ACCEPTED**

01/11/2022

Under the Federal Insecticide, Fungicide  
and Rodenticide Act as amended, for the  
pesticide registered under  
EPA Reg. No. 83529-148

Net Contents: \_\_\_\_\_ Lbs. [Kg.]

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### CAUTION

Harmful if swallowed. Harmful if 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. Harmful if inhaled. Avoid breathing (dust, vapor, or spray mist). Remove contaminated clothing and wash clothing before reuse.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

##### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Water-proof gloves
- In addition, mixers and loaders supporting aerial applications to dried beans, succulent beans, alfalfa, peanuts, soybeans, and/or cotton must wear a minimum of a NIOSH-approved particulate filtering facepiece respirator with any R or P filter; OR a NIOSH-approved elastomeric particulate respirator with any R or P filter; OR a NIOSH-approved powered air purifying respirator with a HE filter.
- Shoes plus socks

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

#### ENGINEERING CONTROLS STATEMENT

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.607(d-f), the handler PPE requirements may be reduced or modified as specified in the WPS. **IMPORTANT:** When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "**Applicator and other handlers**" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

#### USER SAFETY RECOMMENDATIONS

##### Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### 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 contaminate water when disposing of equipment washwater or rinsate. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 24 hours. Rinsing application equipment over the treated area will help avoid runoff to water bodies or drainage systems. Do not apply to any impervious surfaces which may contact or lead directly to surface water, storm drains, or urban runoff conveyance systems (gutters).

For fields to which applications of Sharda Indoxacarb 30% WDG will be made, construct a vegetative filter strip if one does not already exist. Existing and new filter strips must be, at a minimum, 10-foot-wide and composed of grass or other permanent vegetation between the field edge and down gradient aquatic habitat (such as, but not limited to, lakes; reservoirs; rivers; permanent streams; marshes or natural ponds; estuaries; and commercial fish farm ponds). Vegetative filter strips must be maintained to optimize their utility. Only apply products containing indoxacarb onto fields where a maintained vegetative buffer strip of at least **10 feet** exists between the field and down gradient aquatic habitat."

This product is highly toxic to bees and other pollinating insects exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees and other pollinating insects are foraging in the treatment area.

#### DIRECTIONS FOR USE

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

This product can only be used in accordance with the Directions for Use on this label. 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 regulations.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE)

and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

**Do not enter or allow 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
- Water-proof gloves
- Shoes plus socks
- A minimum of a NIOSH-approved particulate filtering facepiece respirator with any R or P filter; OR a NIOSH-approved elastomeric particulate respirator with any R or P filter; OR a NIOSH-approved powered air purifying respirator with a HE filter.

### PRODUCT INFORMATION

**Sharda Indoxacarb 30% WDG** is a water dispersible granule that can be applied as a foliar spray to control many important insects. **Sharda Indoxacarb 30% WDG** is mixed with water for application.

#### Use Restrictions

- Use only in commercial and farm plantings.
- Not for use in home plantings.
- Do not formulate this product into any other End-use products without written permission of Sharda USA LLC.
- **Chemigation:** Do not apply this product through any type of irrigation system except for application to cranberries, mint, potatoes, and sweet corn and as allowed by Federal Supplemental and Special Local Need (SLN) labeling (refer to the **APPLICATION BY CHEMIGATION** section of this label).

### INTEGRATED PEST MANAGEMENT

Sharda USA LLC supports the use of Integrated Pest Management (IPM) programs to control pests. This product may be used as part of an IPM program which can include biological, cultural, and genetic practices aimed at preventing economic pest damage. IPM principles and practices include field scouting or other detection methods, correct target pest identification, population monitoring, rotation of insecticides with different modes-of-action, and treating when target pest populations reach locally determined action thresholds. Consult your State Cooperative Extension Service, professional consultants, or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop or site systems in your area.

### SCOUTING

Monitor insect populations to determine whether or not there is a need for application of Sharda 30% WDG based on locally determined economic thresholds. More than one treatment of Sharda 30% WDG may be required to control a population of pests.

### RESISTANCE MANAGEMENT

For resistance management, **Sharda Indoxacarb 30% WDG** contains Indoxacarb and is classified in the oxadiazine chemical class as a Group 22A insecticide, voltage-dependent sodium channel blockers.

Any insect population may contain individuals naturally resistant to **Sharda Indoxacarb 30% WDG** and other Group 22A 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 must be followed.

To delay insecticide resistance, take the following steps:

- Rotate the use of **Sharda Indoxacarb 30% WDG** or other Group 22A 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 must 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 or representative.

#### MANDATORY SPRAY DRIFT MANAGEMENT

##### Aerial Applications:

- Do not release spray at a height greater than 10 ft. above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators are required to use a Medium or coarser droplet size (ASABE S572.1).
- Do not apply when wind speeds exceed 15 mph at the application site. If wind speed 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 wingspan for fixed-wing aircraft and 90% or less for helicopters.
- Applicators must use ½ swath displacement upwind at the downwind edge of field.
- Do not apply during temperature inversions.

##### Ground Boom Applications:

- Users must only apply with the nozzle height recommended by the manufacturer, but no more than 4 feet above the ground.
- 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.

##### Boom-less 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.

##### Airblast Applications:

- Sprays must be directed into the canopy.
- Do not apply when wind speeds exceed 15 miles per hour at the application site.
- User must turn off outward pointing nozzles at row ends and when spraying outer row.
- Do not apply during temperature inversions.

#### SPRAY DRIFT ADVISORIES

**THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.**

##### **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 must 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 (AIR BLAST)

##### Field Crop Sprayers

Air assisted field crop sprayers carry droplets to the target via a downward directed air stream. Some may reduce the potential for drift, but if a sprayer is unsuitable for the application and/or set up improperly, high drift potential can result. It is the responsibility of the applicator to determine that a sprayer is suitable for the intended application, is configured properly, and that drift is not occurring. **Note:** Air assisted field sprayers can affect product performance by affecting spray coverage and canopy penetration. Refer to the **APPLICATION INSTRUCTION** section of this label to determine if use of an air assisted sprayer is recommended.

##### Tree and Vine Sprayers

Air assisted tree and vine sprayers carry droplets into the canopy of trees and 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 the potential for drift:

- 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.
- Movement of spray that goes beyond the edge of the cultivated area may be minimized by practices such as spraying the outside row only from outside the planting.

**Also refer to Mandatory Spray Drift Management - Air Blast Applications section for additional guidance.**

#### APPLICATION INSTRUCTIONS

Apply at the specified rates in the Crop Use Instructions when insect populations reach locally determined economic thresholds. Consult the State Cooperative Extension Service, professional consultants, or other qualified authorities to determine appropriate threshold levels for treatment in your area.

Follow-up treatments of **Sharda Indoxacarb 30% WDG** should be applied, as needed, to keep pest populations within threshold limits. Apply **Sharda Indoxacarb 30% WDG** on most crops every 3 to 5 days, as specified in the specific crop sections, to maintain control. For bushberry, cranberry, dry bean, pome, and stone fruit the minimum interval between treatments is 7 days.

Use sufficient water to obtain thorough, uniform coverage.

Because **Sharda Indoxacarb 30% WDG** is most effective through ingestion of treated plant material, thorough spray coverage is essential for optimum control of targeted pest insects. Using increased water volumes will typically result in better spray coverage, especially under adverse conditions such as dry, hot weather or dense plant foliage. **Sharda Indoxacarb 30% WDG** may be applied by ground, aerial, or overhead sprinkler chemigation application equipment.

- **For aerial application, use the following directions unless otherwise specified in this label:** Use a minimum of 5 gallons per acre (gpa) of water, except in tree and vine crops use a minimum of 10 gpa.
- **For ground applications, use the following directions unless otherwise specified in this label:** Use a minimum of 10 gallons per acre (gpa) of water, except in tree and vine crops use a minimum of 50 gpa and a maximum of 200 gpa of water.

**Use of Adjuvants:** In some situations where coverage is difficult to achieve such as closed canopy, dense foliage, plants with waxy leaf surfaces, or less than optimum application equipment, an adjuvant may improve performance. Use only adjuvant products that are labeled for agricultural use and follow the directions on the manufacturer's label. For uses in fruit crops, use a proven and recommended adjuvant that does not affect fruit finish.

**Do not** use adjuvant on bushberries or garden beets.

#### MIXING PROCEDURES

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.

Spray equipment must be clean and free of previous pesticide deposits before applying **Sharda Indoxacarb 30% WDG**. Fill spray tank  $\frac{1}{4}$  -  $\frac{1}{2}$  full of water. Add **Sharda Indoxacarb 30% WDG** directly to spray tank. Mix thoroughly to fully disperse the insecticide; once dispersed continued agitation is required. Use mechanical or hydraulic means; do not use air agitation. Spray mix must not be stored overnight in spray tank.

**Compatibility** - Since formulations may be changed and new ones introduced, it is recommended that users premix a small quantity of a desired tank mix and observe for possible adverse changes (settling out, flocculation, etc.). Avoid mixtures of several materials and very concentrated spray mixtures.

This product can be mixed with pesticide products labeled for use on crops on this label in accordance with the most restrictive of label limitations and precautions. Do not exceed label dosage rates. This product cannot be mixed with any product containing a label prohibition against such mixing.

**Tank Mixing Sequence** - Add different formulation types in the sequence indicated below. Allow time for complete mixing and dispersion after addition of each product.

1. Water soluble bags.
2. **Sharda Indoxacarb 30% WDG** and other water dispersible granules.
3. Wettable powders.
4. Water based suspension concentrates.
5. Water soluble concentrates.
6. Oil based suspension concentrates.
7. Emulsifiable concentrates.
8. Adjuvants, surfactants, oils.
9. Soluble fertilizers.
10. Drift retardants.

Follow local practice and manufacturer's recommendations.

#### SPRAY TANK CLEANOUT

Prior to application, start with clean, well-maintained application equipment. Immediately following application, thoroughly clean all spray equipment to reduce the risk of forming hardened deposits which might become difficult to remove.

Drain spray equipment. Thoroughly rinse sprayer and flush hoses, boom, and nozzles with clean water.

Clean all other associated application equipment. Take all necessary safety precautions when cleaning equipment. Do not clean near wells, water sources or desirable vegetation. Dispose of waste rinse water in accordance with local regulations.

#### CROP ROTATION

Crops that are on this label and alfalfa, cotton, peanuts, and soybeans may be planted immediately following harvest. Do not plant for food or feed any other crops not registered for use with indoxacarb for 30 days after last use.

#### APPLICATION BY CHEMIGATION – CRANBERRY, MINT, POTATOES, SPINACH\*, AND SWEET CORN

\*Use on spinach via overhead sprinkler irrigation is allowed only in the states of Arkansas, Georgia, Missouri, North Carolina, New Mexico, Oklahoma, and Texas, unless otherwise permitted in supplemental labeling.

#### Instructions for the Use of Sharda Indoxacarb 30% WDG in Overhead Sprinkler Chemigation Systems.

Overhead chemigation applications offer the advantage of greater penetration and coverage of the target plant. However, typical chemigation applications are more dilute than ground or aerial applications. For best results, it is recommended to keep the concentration of **Sharda Indoxacarb 30% WDG** as high as possible in the application. Apply **Sharda Indoxacarb 30% WDG** in 0.1 - 0.2 inches of water per acre. **Sharda Indoxacarb 30% WDG** is most active as an ingestion insecticide, although it does have activity as a direct contact insecticide. For best results, applications of **Sharda Indoxacarb 30% WDG** must ensure thorough coverage of the target plant to maximize the opportunity for target insects to ingest **Sharda Indoxacarb 30% WDG**.

#### Types of Chemigation Systems:

**Sharda Indoxacarb 30% WDG** may be applied only through overhead sprinkler irrigation systems. Overhead irrigation systems include the following: center pivot, end tow, hand move, lateral move, side roll, solid set, and wheel line. Center pivot and lateral move irrigation systems are preferred. Other overhead sprinkler systems may be used if they provide uniform water distribution.

Do not apply **Sharda Indoxacarb 30% WDG** through any other type of irrigation system. Do not use filter screens smaller than 50-mesh throughout the system, due to possible build-up of material on 100-mesh or smaller screens.

#### Directions for Chemigation:

##### Preparation

Use a pesticide tank for the application of **Sharda Indoxacarb 30% WDG** in chemigation systems. Thoroughly clean the injection system and tank of any fertilizer or chemical residues using a standard clean-out procedure. Dispose of any residues in accordance with State and Federal laws. With the mix tank  $\frac{1}{4}$  -  $\frac{1}{2}$  full with water and the agitator running, measure the required amount of **Sharda Indoxacarb 30% WDG** and add it to the tank. Then add additional water to bring your total pesticide mixture up to the desired volume for your



application. **Note:** Always add the **Sharda Indoxacarb 30% WDG** to water, never put **Sharda Indoxacarb 30% WDG** into a dry tank or other mixing equipment without first adding water. See container label for tank mixing sequence. Continue to agitate the mixture throughout the application process. Use mechanical or hydraulic agitation, do not use air agitation. Highly alkaline water must be buffered so that the pH of the spray solution is in the range of neutral to slightly acidic.

### Injection into Chemigation Systems

Inject the proper amount of **Sharda Indoxacarb 30% WDG** into the irrigation water flow using a positive displacement injection pump. Inject the mixture at a point in the main irrigation water flow to ensure thorough mixing with the irrigation water. For continuously moving systems, inject the solution containing **Sharda Indoxacarb 30% WDG** into the irrigation water line continually and uniformly throughout the irrigation cycle. Apply in no more than 0.2 inches of water per acre. For overhead sprinkler systems that are stationary, add the solution containing **Sharda Indoxacarb 30% WDG** to the irrigation water line and apply no more than 0.2 inches of water per acre just before the end of the irrigation cycle.

### Uniform Water Distribution

The irrigation system used for application of **Sharda Indoxacarb 30% WDG** must provide for uniform distribution of **Sharda Indoxacarb 30% WDG** treated water. Non-uniform distribution might result in crop injury, lack of effectiveness or illegal pesticide residues in or on the crop being treated. Ensure the irrigation system is calibrated to uniformly distribute the chemigation application to the crop. Contact the equipment manufacturer, the local University Extension agent or other experts if you have questions about achieving uniform distribution of the application.

### Equipment Calibration

Calibrate the irrigation system and injector before applying **Sharda Indoxacarb 30% WDG**. Calibrate the injection pump while the system is running using the expected irrigation rate. If you have questions about calibration, contact your State Extension Service specialists, equipment manufacturer, or other experts.

### Monitoring of Chemigation Applications

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of a responsible person, shall shut the system down and make necessary adjustments should the need arise. Wear the personal protective equipment as defined in the PPE section of the label for applicators and other handlers when making adjustments or repairs on the chemigation system when **Sharda Indoxacarb 30% WDG** is in the irrigation water.

### Required System Safety Devices

Do not connect any irrigation system used for pesticide applications to a public water system unless the pesticide label-prescribed safety devices are in place. Public water system means a system for the provision to the public of piped water for human consumption, if such a system has at least 15 service connections or regularly serves an average of at least 25 individuals at least 60 days out of the year.

1. 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.
2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
3. 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.
4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5. 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.
6. 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.
7. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow 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 must 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.

### Operation

Start the water pump and sprinkler, and let the system achieve the desired pressure and speed before starting the injector. Start the injector and calibrate the injection system according to the directions above. This procedure is necessary to deliver the desired rate per acre in a uniform manner. When the application is finished, allow the entire irrigation and injector system to be thoroughly flushed clean before stopping the system.

- End guns must be turned off during the application, if they irrigate non-target areas or if they do not provide uniform application and coverage.
- Plug nozzles in the immediate area of control panels, chemical supply tanks and system safety devices to prevent contamination of these areas.

- Do not apply when wind speed favors drift beyond the area intended for treatment.
- Do not apply when system connections or fittings leak or when nozzles do not provide uniform distribution.
- Do not allow irrigation water to collect or run-off during chemigation.

### Cleaning the System

Thoroughly clean the injection system and tank of any fertilizer or chemical residues using a standard clean-out procedure. Dispose of any residues in accordance with State and Federal laws. Consult your owner's manual or your local equipment dealer for cleanout procedures for your injection system.

## CROP USE DIRECTIONS

### Bean, Dried (except Soybean)[\*]

Including: Dried cultivars of Bean[\*] (*Lupinus*) - includes Grain Lupin, Sweet Lupin, White Lupin, and White Sweet Lupin; Bean [\*] (*Phaseolus*) - includes Field Bean, Kidney Bean, Lima Bean (Dry), Navy Bean, Pinto Bean, Tepary Bean); Bean [\*](*Vigna*) – (includes Adzuki Bean, Blackeyed Pea, Catjang, Cowpea, Crowder Pea, Moth Bean, Mung Bean, Rice Bean, Southern Pea, Urd Bean); Broad Bean[\*] (Dry); Chickpea[\*]; Guar [\*]; Lablab Bean[\*]; and Lentil[\*]

[\*Not registered for use in California]

Pests	Rate per Acre per Application (Oz.)
Corn Earworm	3.5 - 6
European Corn Borer	(0.065 - 0.11 lb. a.i.)

For ground applications, make a uniform application in approximately 20 - 100 gals. of water per acre.

#### Restrictions:

- Make no more than 4 applications per acre per crop.
- Do not apply more than 24 oz. (0.44 lb. a.i.) of **Sharda Indoxacarb 30% WDG** (or a total of 0.44 lb. a.i. of indoxacarb containing products) per acre per crop.
- Do not apply more than 72 oz. (1.32 lbs. a.i.) of **Sharda Indoxacarb 30% WDG** (or a total of 1.32 lb. a.i. of indoxacarb containing products) per acre per year.
- Retreatment Interval: 7 days.
- Pre-Harvest Interval (PHI): 7 days
- Restricted-Entry Interval: 12 hours

### Bean, Succulent (except Soybean)[\*]

Including: Bean [\*](*Phaseolus*) – includes Lima Bean (Green), Broad Bean (Succulent), Runner Bean, Snap Bean, Wax Bean); Bean [\*] (*Vigna*) - includes Asparagus Bean, Blackeyed Pea, Chinese Longbean, Cowpea, Moth Bean, Southern Pea, Yardlong Bean; Jackbean [\*]; and Sword Bean [\*]

[\*Not registered for use in California]

Pests	Rate per Acre per Application (Oz.)
Corn Earworm	3.5 – 6
European Corn Borer	(0.065 - 0.11 lb. a.i.)

For ground applications, make a uniform application in approximately 20 - 100 gals. of water per acre.

#### Restrictions:

- Make no more than 4 applications per acre per crop.
- Do not apply more than 14 oz. (0.26 lb. a.i.) of **Sharda Indoxacarb 30% WDG** (or a total of 0.26 lb. a.i. of indoxacarb containing products) per acre per crop.
- Do not apply more than 56 oz. (1.04 lbs. a.i.) of **Sharda Indoxacarb 30% WDG** (or a total of 1.04 lb. a.i. of indoxacarb containing products) per acre per year.
- Retreatment Interval: 7 days.
- Pre-Harvest Interval (PHI): 3 days
- Restricted-Entry Interval: 12 hours

### Brassica (Cole) Leafy Vegetables

Including: Broccoli, Chinese Broccoli, Broccoli Raab, Brussels Sprouts, Cabbage, Chinese Cabbage (Napa and Bok Choy), Chinese Mustard Cabbage, Cauliflower, Cavalo Broccolo, Collards, Kale, Kohlrabi, Mizuna, Mustard Greens, Mustard Spinach, Rape Greens, and Turnip Tops\*\*

Pests	Rate per Acre per Application (Oz.)
Beet Armyworm	3.5*
Diamondback Moth	(0.065 lb. a.i.*)
Cabbage Looper	2.5 - 3.5*
Cabbage Webworm <sup>1</sup>	(0.045 - 0.065 lb. a.i.*)
Cross Striped Cabbageworm <sup>1</sup>	
Imported Cabbageworm	

#### Restrictions:

- Make no more than 4 applications per acre per crop.
- Do not apply more than 14 oz. (0.26 lb. a.i.) of **Sharda Indoxacarb 30% WDG** (or a total of 0.26 lb. a.i. of indoxacarb containing products) per acre per crop.
- Do not apply more than 56 oz. (1.04 lb. a.i.) of **Sharda Indoxacarb 30% WDG** (or a total of 1.04 lb. a.i. of indoxacarb containing products) per acre per year.
- Retreatment Interval: 3 days.
- Pre-Harvest Interval (PHI): 3 days
- Restricted-Entry Interval: 12 hours
- Do not apply to greenhouse or field grown brassica crops grown for transplant.
- **Resistance Management for Diamondback Moth:** Do not apply **Sharda Indoxacarb 30% WDG** more than twice to any generation of diamondback moth larvae. After the second application, rotate to another insecticide with a different mode of action (i.e., a product with a different IRAC group number). Do not apply less than 3.5 oz. of **Sharda Indoxacarb 30% WDG** per acre. If applications of this product do not result in reduction in diamondback moth larvae populations, immediately stop use of this product and apply a registered insecticide with a different mode of action. Do not make more than 6 total applications per calendar year for control of diamondback moth per farm location.
- **In the State of Georgia:** Do not apply more than 4 applications per calendar year for the control of diamondback moth per farm location.

<sup>1</sup>Not for use in California.

\*Add a wetting agent to improve spray coverage.

\*\*For use on turnips grown for tops or greens, not for the production of turnip roots.

### Bushberries

Including: Aronia Berry, Blueberries (Highbush Blueberry and Lowbush Blueberry), Chilean Guava, Currants (Black Currant, Buffalo Currant, Native Currant and Red Currant), European Barberry, Elderberry, Gooseberry, Highbush Cranberry, Honeysuckle, Huckleberry, Jostaberry, Juneberry, Salal, Sea Buckthorn, and Cultivars, Varieties and/or Hybrids of these

Pests	Rate per Acre per Application (Oz.)
Cherry Fruitworm Cranberry Fruitworm Winter Moth	3.5 – 6 (0.065 – 0.11 lb. a.i.)
Bruce Spanworm Cranberry Weevil (Adults) Plum Curculio (Adults)	6 (0.11 lb. a.i.)

For best results, apply in 20 – 50 gals. of water per acre by ground or 10 gals. of water per acre by air.

#### Restrictions:

- Make no more than 4 applications per acre per crop.
- Do not apply more than 24 oz. (0.44 lb. a.i.) of **Sharda Indoxacarb 30% WDG** (or a total of 0.44 lb. a.i. of indoxacarb containing products) per acre per crop.
- Retreatment Interval: 7 days.
- Pre-Harvest Interval (PHI): 7 days
- Restricted-Entry Interval: 12 hours
- Do not apply dilute applications of more than 200 gals. of water per acre.
- Do not use adjuvants.

### Corn (Sweet)

For application through tassel push only.

Pests	Rate per Acre per Application (Oz.)
European Corn Borer <sup>1</sup> Fall Armyworm Corn Earworm	2.5 – 3.5 (0.045 – 0.065 lb. a.i.)

Whorl stage through tassel push (prior to silking) application only.

**Overhead Chemigation – Sharda Indoxacarb 30% WDG** may be applied to sweet corn by overhead chemigation. For specific guidance, refer to the **APPLICATION BY CHEMIGATION** section. Begin application when sweet corn is in the V1 (1<sup>st</sup> collar) stage of growth up to tassel push (V15) when damage from larvae populations exceed recommended thresholds. For best results, a slurry of **Sharda Indoxacarb 30% WDG**, vegetable oil and an emulsifier must be kept continuously agitated in the injection tank to keep the mixture in suspension and to ensure application of the proper rate per acre.

#### Restrictions:

- Make no more than 4 applications per acre per crop.
- Do not apply more than 14 oz. (0.26 lb. a.i.) of **Sharda Indoxacarb 30% WDG** (or a total of 0.26 lb. a.i. of indoxacarb containing products) per acre per crop.
- Do not apply more than 42 oz. (0.78 lbs. a.i.) of **Sharda Indoxacarb 30% WDG** (or a total of 0.78 lb. a.i. of indoxacarb containing products) per acre per year.
- Retreatment Interval: 3 days.

- Pre-Harvest Interval (PHI): 3 days (35 days for fodder and stover)
- Restricted-Entry Interval: 12 hours (14 days for hand harvesting)

<sup>1</sup>Not for use in California.

### Low Growing Berry Subgroup (except Lowbush Blueberry and Strawberry)

Including: Bearberry, Bilberry, Cloudberry, Cranberry, Lingonberry, Muntries, Partridgeberry, and Cultivars, Varieties and/or Hybrids of these

Pests	Rate per Acre per Application (Oz.)
Cranberry Weevil*	6
Blackheaded Fireworm	(0.11 lb. a.i.)
Black Vine Weevil (Adults)** (OR and WA only)	
Spanworm	

#### Restrictions:

- Make no more than 4 applications per acre per season.
- Do not apply more than 24 oz. (0.44 lb. a.i.) of **Sharda Indoxacarb 30% WDG** (or a total of 0.44 lb. a.i. of indoxacarb containing products) per acre per season.
- Retreatment Interval: 7 days.
- Pre-Harvest Interval (PHI): 30 days
- Restricted-Entry Interval: 12 hours
- Do not apply to flow through bogs or allow release of irrigation water from bogs for at least 1 day following application.

\*Apply up to 2 applications to the spring (overwintering) generation of adult cranberry weevil prior to bloom. Do not apply more than 12 oz. (0.22 lb. a.i.) **Sharda Indoxacarb 30% WDG** per acre per season for control of cranberry weevils.

\*\*Black vine weevil adults are nocturnal feeders - it is important to monitor adult emergence by regular sweeping or trapping in the evening hours. Make repeat applications on a 7- to 10-day schedule if monitoring indicates continued adult feeding activity. Broadcast applications may need supplemental spot treatments in localized areas of heavy insect pressure. Allow 5 to 7 days to achieve maximum results, then follow-up with night-time monitoring.

### Cucurbit Vegetables

Including: Chayote (Fruit), Chinese Waxgourd (Chinese Preserving Melon), Citron Melon, Cucumber, Gherkin, Edible Gourd (including Hyotan, Cucuzza, Hechima, and Chinese Okra), *Momordica* species (including Balsam Apple, Balsam Pear, Bitter Melon, and Chinese Cucumber), Muskmelon (including True Cantaloupe, Cantaloupe, Casaba, Crenshaw Melon, Golden Pershaw Melon, Honeydew Melon, Honey Balls, Mango Melon, Persian Melon, Pineapple Melon, Santa Claus Melon, and Snake Melon), Pumpkin, Summer Squash (including Crookneck Squash, Scallop Squash, Straightneck Squash, Vegetable Marrow, and Zucchini), Winter Squash (including Butter-Nut Squash, Calabaza, Hubbard Squash, Acorn Squash, and Spaghetti Squash), and Watermelon

Pests	Rate per Acre per Application (Oz.)
Cabbage Looper	2.5 - 6
Melonworm	(0.045 - 0.11 lb. a.i.)
Pickleworm	
Beet Armyworm	3.5 - 6
	(0.065 - 0.11 lb. a.i.)

For ground applications, apply using a minimum of 10 gals. per acre of water.

#### Restrictions:

- Make no more than 4 applications per acre per crop.
- Do not apply more than 24 oz. (0.44 lb. a.i.) of **Sharda Indoxacarb 30% WDG** (or a total of 0.44 lb. a.i. of indoxacarb containing products) per acre per crop.
- Do not apply more than 72 oz. (1.32 lbs. a.i.) of **Sharda Indoxacarb 30% WDG** (or a total of 1.32 lb. a.i. of indoxacarb containing products) per acre per year.
- Retreatment Interval: 5 days.
- Pre-Harvest Interval (PHI): 3 days
- Restricted-Entry Interval: 12 hours

### Fruiting Vegetables and Okra

Including: Eggplant, Groundcherry, Pepino, Peppers (Bell, Chili, Cooking, Pimento, and Sweet), Tomatillo, and Tomato

Pests	Rate per Acre per Application (Oz.)
Beet Armyworm	3.5
European Corn Borer* <sup>1</sup> - Bell Pepper Only	(0.065 lb. a.i.)
Leafminer (Use on Florida Tomatoes Only - Suppression Only)**	
Southern Armyworm	
Tomato Fruitworm	
Tomato Pinworm	
Western Yellowstriped Armyworm	
Hornworms	2.5 - 3.5
Loopers	(0.045 - 0.065 lb. a.i.)

#### Restrictions:

- Make no more than 4 applications per acre per crop.
- Do not apply more than 14 oz. (0.26 lb. a.i.) of **Sharda Indoxacarb 30% WDG** (or a total of 0. lb. a.i. of indoxacarb containing products) per acre per crop.
- Do not apply more than 42 oz. (0.78 lb. a.i.) of **Sharda Indoxacarb 30% WDG** (or a total of 0.78 lb. a.i. of indoxacarb containing products) per acre per year.
- Retreatment Interval: 5 days.
- Pre-Harvest Interval (PHI): 3 days
- Restricted-Entry Interval: 12 hours

<sup>1</sup>Not for use in California.

\*European corn borer applications for use only on bell peppers - For best results, begin applications of **Sharda Indoxacarb 30% WDG** following 2 applications of an organo-phosphate insecticide labeled for European corn borer control in bell pepper.

\*\*Suppression of leafminer on Florida tomatoes- Use of an adjuvant may improve performance.

### Garden Beet

Pests	Rate per Acre per Application (Oz.)
Beet Armyworm	3.5 - 6 (0.065 - 0.11 lb. a.i.)

#### Restrictions:

- Make no more than 4 applications per acre per crop.
- Do not apply more than 24 oz. (0.44 lb. a.i.) of **Sharda Indoxacarb 30% WDG** (or a total of 0.44 lb. a.i. of indoxacarb containing products) per acre per crop.
- Do not apply more than 96 oz. (1.76 lbs. a.i.) of **Sharda Indoxacarb 30% WDG** (or a total of 1.76 lb. a.i. of indoxacarb containing products) per acre per year.
- Retreatment Interval: 3 days.
- Pre-Harvest Interval (PHI): 7 days
- Restricted-Entry Interval: 12 hours
- Do not use adjuvants.

### Grape

Pests	Rate per Acre per Application (Oz.)
Grape Leafroller Japanese Beetle <sup>1</sup> Western Grapeleaf Skeletonizer	3.5 - 6 (0.065 - 0.11 lb. a.i.)
European Grapevine Moth Grape Berry Moth <sup>1</sup> Leafhoppers (Suppression Only) Light Brown Apple Moth	5 - 6 (0.09 - 0.11 lb. a.i.)
Katydid (Nymphs)* Omnivorous Leafroller	6 (0.11 lb. a.i.)

Make the first application at initiation of egg hatch or at the first signs of infestation for each generation. Use the higher listed application rate for moderate to heavy insect pressure. Make application before pests reach damaging levels. Monitor fields and make an additional application if populations rebuild to potentially damaging levels. Apply in sufficient water to obtain thorough coverage of foliage. Consult your State Cooperative Extension Service, professional consultants, or other qualified authorities to determine appropriate action threshold levels for these pests.

For best results, use an adjuvant to help increase coverage, penetration and thus performance.

#### Restrictions:

- Make no more than 2 applications per season.
- Do not apply more than 12 oz. (0.22 lb. a.i.) of **Sharda Indoxacarb 30% WDG** (or a total of 0.22 lb. a.i. of indoxacarb containing products) per acre per year.
- Retreatment Interval: 21 days.
- Pre-Harvest Interval (PHI): 7 days
- Restricted-Entry Interval: 12 hours

<sup>1</sup>Not for use in California.

\*Forktailed bush katydid (*Scudderia furcata*) and Angularwinged katydid (*Microcentrum retinerve*) - Correct timing of spray application is to the early nymphal stages; thorough spray coverage is critical to achieve best results. Make repeat applications on a 7- to 10-day schedule if monitoring indicates continued feeding activity.

### Small Fruit Vine Climbing Subgroup (except Fuzzy Kiwifruit)

Including: Amur River Grape, Gooseberry, Kiwifruit (Hardy), Maypop, Schisandra Berry, Cultivars, Varieties, and/or Hybrids of these

Pests	Rate per Acre per Application (Oz.)
Grape Leafroller Japanese Beetle <sup>1</sup> Western Grapeleaf Skeletonizer	3.5 - 6 (0.065 - 0.11 lb. a.i.)

Grape Berry Moth <sup>1</sup> Leafhoppers (Suppression Only)	5 - 6 (0.09 - 0.11 lb. a.i.)
Omnivorous Leafroller	6 (0.11 lb. a.i.)

Make the first application at initiation of egg hatch or at the first signs of infestation for each generation. Use the higher application rate for moderate to heavy insect pressure. Make application before pests reach damaging levels. Monitor fields and make an additional application if populations rebuild to potentially damaging levels. Apply in sufficient water to obtain thorough coverage of foliage. Consult your State Cooperative Extension Service, professional consultants, or other qualified authorities to determine appropriate action threshold levels for these pests.

For best results, use an adjuvant to help increase coverage, penetration and thus performance.

**Restrictions:**

- Make no more than 2 applications per season.
- Do not apply more than 12 oz. (0.22 lb. a.i.) of **Sharda Indoxacarb 30% WDG** (or a total of 0.22 lb. a.i. of indoxacarb containing products) per acre per year.
- Retreatment Interval: 21 days.
- Pre-Harvest Interval (PHI): 7 days
- Restricted-Entry Interval: 12 hours

<sup>1</sup>Not for use in California.

**Leafy Green Vegetables (except Spinach and Spinach Varieties)**

Including: Arugula (Roquette), Chervil, Edible-Leaved Chrysanthemum, Garland Chrysanthemum, Corn Salad, Garden Cress, Upland Cress (Yellow Rocket, Winter Cress), Dandelion, Dock (Sorrel), Endive (Escarole), Head and Leaf Lettuce, Orach, Parsley, Garden Purslane, Winter Purslane, and Radicchio (Red Chicory)

Pests	Rate per Acre per Application (Oz.)
Beet Armyworm Corn Earworm	3.5 - 6 (0.065 - 0.11 lb. a.i.)
Cabbage Looper	2.5 - 3.5 (0.045 - 0.065 lb. a.i.)

**Restrictions:**

- Make no more than 4 applications per season.
- Do not apply more than 24 oz. (0.44 lb. a.i.) of **Sharda Indoxacarb 30% WDG** (or a total of 0.44 lb. a.i. of indoxacarb containing products) per acre per crop.
- Do not apply more than 96 oz. (1.76 lbs. a.i.) of **Sharda Indoxacarb 30% WDG** (or a total of 1.76 lb. a.i. of indoxacarb containing products) per acre per year.
- Retreatment Interval: 3 days.
- Pre-Harvest Interval (PHI): 3 days
- Restricted-Entry Interval: 12 hours

**Leafy Petioles**

Including: Cardoon, Celery, Chinese Celery, Celtuce, Florence Fennel (Finocchio), Rhubarb, and Swiss Chard

Pests	Rate per Acre per Application (Oz.)
Beet Armyworm Cabbage Looper	3.5 (0.065 lb. a.i.)

**Restrictions:**

- Make no more than 4 applications per season.
- Do not apply more than 14 oz. (0.26 lb. a.i.) of **Sharda Indoxacarb 30% WDG** (or a total of 0.26 lb. a.i. of indoxacarb containing products) per acre per crop.
- Do not apply more than 56 oz. (1.04 lbs. a.i.) of **Sharda Indoxacarb 30% WDG** (or a total of 1.04 lb. a.i. of indoxacarb containing products) per acre per year.
- Retreatment Interval: 3 days.
- Pre-Harvest Interval (PHI): 3 days
- Restricted-Entry Interval: 12 hours

**Mint (Peppermint and Spearmint)**

Pests	Rate per Acre per Application (Oz.)
Cabbage Looper Spotted Cutworm	3.5 (0.065 lb. a.i.)

For ground applications, apply using a minimum of 20 gals. per acre of water.

**Overhead Chemigation - Sharda Indoxacarb 30% WDG** may be applied to mint by overhead chemigation. For specific guidance, refer to the **APPLICATION BY CHEMIGATION** section.

**Restrictions:**

- Make no more than 4 applications per acre per crop.
- Do not apply more than 14 oz. (0.26 lb. a.i.) of **Sharda Indoxacarb 30% WDG** (or a total of 0.26 lb. a.i. of indoxacarb containing products) per acre per year.
- Retreatment Interval: 3 days.
- Pre-Harvest Interval (PHI): 7 days
- Restricted-Entry Interval: 12 hours

**Pear**

<b>Pests</b>	<b>Rate per Acre per Application (Oz.)</b>
Codling Moth - East of the Rocky Mountains	5 - 6 (0.09 - 0.11 lb. a.i.)
Codling Moth - West of the Rocky Mountains*	5 - 6 (0.09 - 0.11 lb. a.i.)
Light Brown Apple Moth Oriental Fruit Moth Pandemis Leafroller <sup>1</sup> Redbanded Leafroller White Apple Leafhopper <sup>1</sup>	5 - 6 (0.09 - 0.11 lb. a.i.)

For best results, apply 50 - 150 gals. water per acre.

**Restrictions:**

- Make no more than 3 applications prior to hand-thinning. No hand-thinning after the fourth application.
- Make no more than 4 applications per season.
- Do not apply more than 24 oz. (0.44 lb. a.i.) of **Sharda Indoxacarb 30% WDG** (or a total of 0.44 lb. a.i. of indoxacarb containing products) per acre per year.
- Retreatment Interval: 7 days.
- Pre-Harvest Interval (PHI): 28 days
- Restricted-Entry Interval: 12 hours
- Do not apply dilute applications of more than 200 gals. water per acre.

\*West of the Rockies. For use against low to moderate infestations in conjunction with alternate control measures such as established Mating Disruption blocks.

<sup>1</sup>Not for use in California.

**Pome Fruit (except Pear)**

Including: Apple, Crabapple, Loquat, Mayhaw, and Quince

<b>Pests</b>	<b>Rate per Acre per Application (Oz.)</b>
Codling Moth - East of the Rocky Mountains	5 - 6 (0.09 - 0.11 lb. a.i.)
Codling Moth - West of the Rocky Mountains*	5 - 6 (0.09 - 0.11 lb. a.i.)
European Apple Sawfly <sup>1</sup> Green Fruitworm <sup>1</sup> Lesser Appleworm Light Brown Apple Moth Oriental Fruit Moth Pandemis Leafroller Plum Curculio Potato Leafhopper Redbanded Leafroller Spotted Tentiform Leafminer (Suppression Only)** <sup>1</sup> Tarnished Plant Bug Tufted Apple Bud Moth White Apple Leafhopper (OR and WA only)***	5 - 6 (0.09 - 0.11 lb. a.i.)
Lacanobia Fruitworm <sup>1</sup>	3 - 6 (0.056 - 0.11 lb. a.i.)
Apple Maggot****	6 (0.11 lb. a.i.)

For best results, apply 50 - 150 gals. water per acre.

**Restrictions:**

- Make no more than 3 applications prior to hand-thinning. No hand-thinning after the fourth application.
- Make no more than 4 applications per season.
- Do not apply more than 24 oz. (0.44 lb. a.i.) of **Sharda Indoxacarb 30% WDG** (or a total of 0.44 lb. a.i. of indoxacarb containing products) per acre per year.

products) per acre per year.

- Retreatment Interval: 7 days.
- Pre-Harvest Interval (PHI): 14 days
- Restricted-Entry Interval: 12 hours
- Do not apply dilute applications of more than 200 gals. water per acre.

\*West of the Rockies. For use against low to moderate infestations in conjunction with alternate control measures such as established Mating Disruption blocks.

\*\*Use of an adjuvant may improve performance. For best results, especially when using the lower use rate, use an adjuvant.

\*\*\*White apple leafhopper - Application rates of 2.5 - 4.9 oz. (0.045 - 0.089 lb. a.i.) per acre may be used for suppression of light infestations.

\*\*\*Apple maggot entering the orchard from border areas may not be controlled if they do not feed on treated apples prior to oviposition.

<sup>1</sup>Not for use in California.

### Spinach, New Zealand Spinach

#### Vine Spinach and Amaranth (Leafy Amaranth, Chinese Spinach Amaranth)

Pests	Rate per Acre per Application (Oz.)
Beet Armyworm	3.5
Cabbage Looper	(0.065 lb. a.i.)

Make sequential applications at 3-day intervals or until insect populations are brought below threshold.

**Overhead Chemigation** - Use on spinach via overhead sprinkler irrigation is allowed only in the states of Arkansas, Georgia, Missouri, North Carolina, New Mexico, Oklahoma, and Texas, unless otherwise permitted in supplemental labeling. For specific guidance, refer to the **APPLICATION BY CHEMIGATION** section.

#### Restrictions:

- Make no more than 4 applications per acre per crop.
- Do not apply more than 14 oz. (0.26 lb. a.i.) of **Sharda Indoxacarb 30% WDG** (or a total of 0.26 lb. a.i. of indoxacarb containing products) per acre per crop.
- Do not apply more than 56 oz. (1.04 lbs. a.i.) of **Sharda Indoxacarb 30% WDG** (or a total of 1.04 lb. a.i. of indoxacarb containing products) per acre per year.
- Retreatment Interval: 3 days.
- Pre-Harvest Interval (PHI): 3 days
- Restricted-Entry Interval: 12 hours

### Stone Fruit

Including: Apricot, Sweet Cherry, Tart Cherry, Nectarine, Peach, Plum, Chicksaw Plum, Damson Plum, Japanese Plum, Plumcot, and Prune

Pests	Rate per Acre per Application (Oz.)
Light Brown Apple Moth	5 - 6
Plum Curculio	(0.09 - 0.11 lb. a.i.)
Katydid (Nymphs)*	6
Oriental Fruit Moth**	(0.11 lb. a.i.)
Peach Twig Borer***	

For best results, apply 50 - 150 gals. water per acre.

#### Restrictions:

- Make no more than 3 applications prior to hand-thinning. No hand-thinning after the fourth application.
- Make no more than 4 applications per season.
- Do not apply more than 24 oz. (0.44 lb. a.i.) of **Sharda Indoxacarb 30% WDG** (or a total of 0.44 lb. a.i. of indoxacarb containing products) per acre per year.
- Retreatment Interval: 7 days.
- Pre-Harvest Interval (PHI): 14 days
- Restricted-Entry Interval: 12 hours
- Do not apply dilute applications of more than 200 gals. water per acre.

\*Forktailed bush katydid (*Scudderia furcata*) and Angularwinged katydid (*Microcentrum retinerve*) - Correct timing of spray application is to the early nymphal stages; thorough spray coverage is critical to achieve best results. Make repeat applications on a 7- to 10-day schedule if monitoring indicates continued feeding activity.

\*\*Oriental fruit moth (OFM) - For applications East of the Rockies: **Sharda Indoxacarb 30% WDG** is effective for control of OFM when used as part of an effective IPM program. Rotate to a product with another mode of action after each **Sharda Indoxacarb 30% WDG** application. West of the Rockies: **Sharda Indoxacarb 30% WDG** provides suppression only of OFM.

\*\*\*Peach twig borer - **Sharda Indoxacarb 30% WDG** may be used as an early bloom or in-season spray for peach twig borer. **Sharda Indoxacarb 30% WDG** provides control of fruit strikes by peach twig borer and suppression of shoot strikes. Peach twig borer (dormant and delayed dormant, CA only) - **Sharda Indoxacarb 30% WDG** may be used as a dormant or delayed-dormant spray for the control of first-generation peach twig borer. Make application with an EPA-registered dormant oil; for specific recommendations on the use of oil consult the manufacturer's label. For best performance, ground application equipment is recommended.

### Tuberous and Corm Vegetables

Including: Arracacha, Arrowroot, Chinese Artichoke, Jerusalem Artichoke, Edible Canna (Queensland Arrowroot), Bitter and Sweet



Cassava, Chayote (Root), Chufa, Dasheen (Taro), Ginger, Leren, Potato, Sweet Potato, Tanier (Cocoyam), Tumeric, Yam Bean (Jicama, manioc pea), and True Yam

Pests	Rate per Acre per Application (Oz.)
Cabbage Looper	2.5 - 6 (0.045 - 0.11 lb. a.i.)
Colorado Potato Beetle* European Corn Borer <sup>1</sup>	3.5 - 6 (0.065 - 0.11 lb. a.i.)
Potato Tuberworm**	3 - 6 (0.056 - 0.11 lb. a.i.)

**Overhead Chemigation** - For potato only - **Sharda Indoxacarb 30% WDG** may be applied by overhead chemigation. For specific guidance, refer to the **APPLICATION BY CHEMIGATION** section.

#### Restrictions:

- Make no more than 4 applications per acre per crop.
- Do not apply more than 24 oz. (0.44 lb. a.i.) of **Sharda Indoxacarb 30% WDG** (or a total of 0.44 lb. a.i. of indoxacarb containing products) per acre per crop.
- Do not apply more than 96 oz. (1.76 lbs. a.i.) of **Sharda Indoxacarb 30% WDG** (or a total of 1.76 lb. a.i. of indoxacarb containing products) per acre per year.
- Retreatment Interval: 5 days.
- Pre-Harvest Interval (PHI): 7 days
- Restricted-Entry Interval: 12 hours

\*Colorado potato beetle - In situations where Colorado potato beetle populations are known or suspected to be difficult to control with current insect control products, the inclusion of piperonyl butoxide (PBO) with **Sharda Indoxacarb 30% WDG** may be necessary to achieve optimum control. In these situations, a combination of **Sharda Indoxacarb 30% WDG** applied at a rate of 3.5 - 6.0 oz. per acre combined with 0.25 lb. a.i. per acre of PBO may be necessary to achieve the most effective control of Colorado potato beetle larvae. Apply the low rates on small plants, small insects, and light infestations of insects. Use intermediate rates on large insects and heavier infestations of insects. Use the highest specified rate for controlling severe infestations. Apply **Sharda Indoxacarb 30% WDG** as a thorough coverage spray using properly calibrated air or ground spray equipment. Use sufficient water to obtain thorough and uniform coverage. For aerial application, use a minimum of 5 gals. of water per acre.

\*\*Potato tuberworm foliar feeding larvae - **Sharda Indoxacarb 30% WDG** is most effective when applied by ground, air or overhead chemigation to vigorously growing plants through tuber bulking prior to the beginning of crop senescence. For control of potato tuberworm foliar feeding larvae, apply **Sharda Indoxacarb 30% WDG** when tuberworm larvae and/or moth counts reach locally established treatment threshold populations. **Sharda Indoxacarb 30% WDG** is absorbed into leaf tissue via translaminar movement and is most effective when applied to vigorously growing plants through tuber bulking (Growth Stage IV) prior to the beginning of crop senescence (Growth Stage V). Repeat applications of effective insecticides may be needed to keep tuberworm larvae populations as low as possible prior to harvest in order to reduce the risk of tuber damage. Failure to adequately control tuberworm larvae prior to crop senescence or vinekill increases the risk of tuber damage. To improve control of adults (moths), apply **Sharda Indoxacarb 30% WDG** in a tank-mix with a pyrethroid insecticide. Potato tuberworm is a difficult pest to control due to several factors; eggs can be laid deep in the canopy and on the underside of the leaf, and larvae feed inside the leaves prior to moving to the soil to feed on the tubers. An integrated spray approach is essential. Foliar sprays alone (ground or air) may not provide adequate control of larvae in the mid to lower crop canopy. For best results, apply via chemigation or integrate chemigation applications into the foliar spray program. Ensure thorough coverage by using sufficient spray volumes. For ground applications use at least 10 gals. of water per acre. For aerial applications, use at least 5 gals. of water per acre. For best results with foliar sprays, add Methylated Seed Oil (MSO) as a spray adjuvant at 1 gal. per 100 gals. of spray volume (1% v/v). For chemigation applications, apply in 0.1 - 0.2 acre-inch of water and add MSO at 12 - 16 fl. oz. per acre. Do not make more than 2 sequential applications of **Sharda Indoxacarb 30% WDG** for control of potato tuberworm before rotating to another registered insecticide having a different mode of action.

<sup>1</sup>Not for use in California.

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Do not subject to temperatures below 32 degrees F. Store product in original container only in a location inaccessible to children and pets. Do not contaminate water, other pesticides, fertilizer, food, or feed in storage. Not for use or storage in or around the home.

**PESTICIDE DISPOSAL:** 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 in proper disposal methods.

#### CONTAINER HANDLING:

**Non-Refillable Plastic Containers (Capacity Equal to or Less Than 50 Pounds):** Non-refillable container. Do not reuse or refill this container. 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 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 puncture and dispose of in a sanitary landfill or by other procedures approved by State and local authorities.

**Non-Refillable Plastic Containers (Capacity Greater Than 50 Pounds):** Non-refillable container. Do not reuse or refill this container. 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 ¼ 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 approved by State and local authorities.

**Refillable Plastic Containers:** Refillable container. Refilling Container: Refill this container with this insecticide only. Do not reuse this container for any other purpose. Cleaning before refilling is the responsibility of the refiller. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn out threads and closure devices. Check for leaks after refilling and before transporting. Disposing of Container: Do not reuse this container for any other purpose other than refilling (see preceding). Cleaning the container before final disposal is the responsibility of the person disposing of the container. To clean the container before final disposal, use the following pressure rinsing procedure. Insert a lance fitted with a suitable tank cleaning nozzle into the container and ensure that the water spray thoroughly covers the top, bottom and all sides inside the container. The nozzle manufacturer generally provides instructions for the appropriate spray pressure, spray duration and/or spray volume. If the manufacturer's instructions are not available, pressure rinse the container for at least 60 seconds using a minimum pressure of 30 PSI with a minimum rinse volume of 10% of the container volume. Drain, pour or pump rinsate into application equipment or rinsate collection system. Repeat this pressure rinsing procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill or by other procedures approved 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.

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