

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

WASHINGTON, D.C. 20460

September 11, 2024

SENT BY EMAIL

Mike Niedbalski mike.niedbalski@syntechresearch.com SHARDA USA LLC

Subject: Labeling Notification per Pesticide Registration Notice (PRN) 98-10 - Addition of Alternate

Brand Name

Product Name: SHARDA CLOTHIANIDIN 48% FS

Admin Number: 83529-241 EPA Receipt Date: 05/09/2024 Action Case Number: 00611788

Dear Mike Niedbalski:

The U.S. Environmental Protection Agency is in receipt of your application for notification under Pesticide Registration Notice 98-10 for the above referenced product. The EPA has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The labeling submitted with this application has been stamped "Notification" and will be placed in our records.

The alternate brand name: Carisma has been added to the registration. Our records have been updated accordingly.

Should you wish to add/retain a reference to your 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 EPA. If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the 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 EPA find or if it is brought to our attention that a website contains statements or claims substantially differing from statements or claims made in connection with obtaining a FIFRA section 3 registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

If you have questions, please contact Scott Campbell via email at campbell.scott@epa.gov. Sincerely,

Scatt Campbell (for)

Venus Eagle, PM01 IVB3, RD Office of Pesticide Programs

[MASTER LABEL] NOTIFICATION

83529-241

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

CLOTHIANIDIN GROUP 4A INSECTICIDE

Sharda Clothianidin 48% FS

ABN: Carisma

09/11/2024

For Seed Treatment Use on Broccoli, Canola, Cereal Grains (except Corn, Rice, Sorghum, and Wild Rice), Rapeseed, Corn, Cotton, Carrot, Leafy Greens, Leek, Onion (Bulb and Bunching), Potato (Seed Piece Treatment), Rice, Sorghum, Soybean, and Sugarbeet for the Control of Listed Insect Pests.

All seed treated with this product must be conspicuously colored at the time of treatment.

 ACTIVE INGREDIENT:
 WT. BY %

 Clothianidin
 48.0%

 OTHER INGREDIENTS:
 52.0%

 TOTAL:
 100.0%

 Contains 5 pounds of clothianidin per U.S. gallon.
 100.0%

KEEP OUT OF REACH OF CHILDREN CAUTION

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

	FIRST AID
IF SWALLOWED:	 Call poison control center or doctor immediately for treatment advice. DO NOT induce vomiting unless told to by a poison control center or doctor. Have person sip a glass of water if able to swallow. 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 INHALED:	 Move person to fresh air. If person is not breathing, call 911 or ambulance, and then give artificial respiration, preferably mouth-to- mouth if possible. Call a poison control center or doctor for further treatment advice.
	HOTLINE NUMBER
	ontainer or label with you when calling a poison control center or doctor or going for treatment. For attion concerning this product, call your poison control center at 1-800-222-1222 .
	NOTE TO PHYSICIAN
No specific antidote is	s available. Treat the patient symptomatically.

No specific antidote is available. Treat the patient symptomatically.

[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. 83529-241

EPA Est. No. XXXXX-XX-XXX



Net	Contents:	Gals. [L.]
Lot	No.:	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed. Harmful if absorbed through the skin. Harmful if inhaled. Avoid contact with skin, eyes, or clothing. Avoid breathing spray mist.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made out of barrier laminate, nitrile rubber ≥14 mils, butyl rubber ≥14 mils, neoprene rubber ≥14 mils, polyvinyl chloride (PVC) ≥14 mils or Viton ≥14 mils
- 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.

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 product is toxic to birds and 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 cleaning equipment or disposing of equipment washwaters or rinsate. **DO NOT** apply where runoff is likely to occur. Drift and runoff from treated areas may be hazardous to aquatic organisms in water adjacent to treated areas. Apply this product only as specified on the label.

Treated seed exposed on soil surface maybe hazardous to birds and mammals. Cover or collect spilled seeds. This compound is highly toxic to bees exposed directly (contact).

Groundwater Advisory

This chemical has properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow. Therefore, contain any product spills or equipment leaks and dispose of wastes according to the disposal instructions on this label.

DIRECTIONS FOR USE

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

DO NOT apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

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

DO NOT enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 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:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made out of barrier laminate, nitrile rubber ≥14 mils, butyl rubber ≥14 mils, neoprene rubber ≥14 mils, polyvinyl chloride (PVC) ≥14 mils or Viton ≥14 mils
- Shoes plus socks

PRODUCT INFORMATION

Sharda Clothianidin 48% FS is a systemic insecticide seed treatment for use on broccoli, canola, cereal grains (except corn, rice, sorghum, and wild rice), corn, cotton, carrot, leafy greens, leek, onion (bulb and bunching), potato (seed piece treatment), rapeseed,

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rice, sorghum, soybean, and sugarbeet for the control of listed insects. This product provides early season protection against the listed insect pests and provides protection under low to moderate corn rootworm pressure.

APPLICATION INSTRUCTIONS

Use **Sharda Clothianidin 48% FS** in liquid or slurry treaters. Mix thoroughly before use or use entire container at one time. Pre-test all tank mixes to determine physical compatibility between formulations. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture.

Treatment of highly mechanically damaged seed, or seed of known low vigor or poor quality, may result in reduced germination and/or reduction of seed and seedling vigor. Treat and conduct germination tests on a small portion of seed before committing the total seed lot to a selected chemical treatment. Due to seed quality conditions beyond the control of Sharda USA LLC, no claims are made to guarantee germination of carry-over seed.

Use Restrictions:

- All seed treated with this product must be conspicuously colored at the time of treatment. This product contains no colorant. A
 U.S. EPA approved dye or colorant must be added when this product is applied to seed to distinguish and prevent subsequent
 inadvertent use as a food for man or feed for animals. Regulations pertaining to coloration of treated seed enforced by 40 CFR
 153.155 must be strictly adhered to when using this product.
- For use only in commercial seed treatment facilities. Not for use in hopper box, planter box, slurry box, or other on-farm seed treatment applications except for cereal grains (except corn, rice, sorghum, and wild rice) and potato seed pieces.
- Regardless of method of application (seed treatment, soil, or foliar), **DO NOT** apply more than 0.2 lb. of active ingredient clothianidin per acre per calendar year.
- Not for use on sorghum seed in the state of California.

Refer to the specific use directions and restrictions in each crop table.

ROTATIONAL CROP PLANT-BACK INTERVALS

Crop Planted	Immediate Plant-Back	30-Day Plant-Back	4-Month Plant-Back	8-Month Plant-Back	12-Month Plant-Back
Field Corn, Popcorn, Soybean, Potato, Cereal Grains, Broccoli, Cotton, Carrot, Leeks, and Onions	Cereal Grains, Canola, Soybeans, Cotton, Root and Tuber Vegetables, Leafy Green Vegetables, Brassica (Cole) Vegetables, Fruiting Vegetables, Cucurbit Vegetables, and Bulb Vegetables	Grasses, Non- Grass Animal Feeds, and Dry Beans		Sugarcane	Any crops without an earlier plant- back interval.
Sweet Corn, Canola, Rapeseed, and Sorghum	Cereal Grains, Canola, Soybeans, Cotton, Root and Tuber Vegetables, Leafy Green Vegetables, Brassica (Cole) Vegetables, Fruiting Vegetables, Cucurbit Vegetables, and Bulb Vegetables	Grasses, Non- Grass Animal Feeds, and Dry Beans	Any crop without an earlier plant- back interval.		

SPECIFIC CROP DIRECTIONS

COMMERCIAL SEED TREATMENT FACILITIES

BROCCOLI				
Insect Pests	Product Rate (Grams a.i. per 1,000 seed)	Product Rate (fl. oz. per 1,000 seed)		
Aphids	1.1925	0.068		
Bagrada Bug				
Cabbage Maggot				
Flea Beetle				

Insect Pests	Product Rate (fl. oz. per 100 lbs. seed)	Product Rate (mg a.i. per seed)*	Remarks
Flea Beetle Wireworm	3.84	0.00664	Use this rate under low to moderate flea beetle pressure.
	5.12	0.008863	Use this rate under moderate flea beetle pressure.
	10.23	0.01770	Use this rate under high to extreme flea beetle pressure where extended control is required.

		Page 4 of 10		
(Except Corn, Rice, Sorghum and Wild Rice) Barley, Buckwheat, Millet (pearl and prosso), Oats, Rye, Teosinte, Triticale, and Wheat				
Insect Pests Product Rate (fl. oz. per 100 lbs. seed) Product Rate (mg a.i. per s				
Wireworm	0.25 - 1.79	0.00324 - 0.02318		
Aphid (including Bird cherry-oat, English grain,	0.75 - 1.79	0.00971 - 0.02318		
Greenbug, and Russian wheat aphid)				
Grasshopper**	1.79	0.02318		
Hessian Fly				

Application:

- For wireworm seed protection, use a 0.25 fl. oz. per 100 lbs. seed rate or higher, depending on field history and site populations.
- For Hessian fly protection to wheat seedlings in the Fall season, use 1.79 fl. oz. per 100 lbs. seed.
- For maximum effectiveness, treat seed uniformly. Use the higher rate to provide increased length of protection and from heavy insect pressure and to reduce potential spread of Barley yellow dwarf virus due to aphid vectors.
- Grasshopper feeding damage to seedling plants under low to moderate insect pressure will be reduced when **Sharda Clothianidin 48% FS** is used. Treated seed may be planted as a 50 60 ft. border around the edges of the crop field as a barrier to grasshoppers advancing into the interior of the field.

*Rate is calculated based on number of seeds/lb. averages of wheat (13,700).

^{**}Not registered for use in California.

CORN, FIELD AND POP			
Insect Pests	Product Rate (mg a.i. per seed)	Product Rate (fl. oz. per 80,000 seeds)	
Corn Rootworm (including Northern, Western,	1.25	5.64	
Southern, and Mexican)			
Southern Corn Billbug			
Chinch Bug	0.25 - 0.50	1.13 - 2.26	
Corn Flea Beetle			
Corn Leaf Aphid			
Cutworm, Black			
Grape Colaspis			
Seedcorn Maggot			
Southern Corn Leaf Beetle			
Southern Corn Rootworm			
Southern Green Stinkbug			
Storage Pests* (including Indian meal moth, Lesser			
grain borer, Red flour beetle, Rice weevil, and Rusty			
grain beetle)			
Sugarcane Beetle			
White Grub (including European, Chafer larvae,			
May/June beetle larvae, and Japanese beetle larvae)			
Thrips			
Wireworm			
Corn Flea Beetle (through first true seed leaf)	0.125	0.57	
Seedcorn Maggot**			
Storage Pests* (including Indian meal moth, Lesser			
grain borer, Red flour beetle, Rice weevil, and Rusty			
grain beetle)			
White Grub** (including European, Chafer larvae,			
May/June beetle larvae, and Japanese beetle larvae)			

*It is recommended that seed with existing populations of storage pests be fumigated prior to treating and bagging seed.

**For seed protection only.

CORN, SWEET				
Insect Pests	Product Rate (mg a.i. per seed)	Product Rate (fl. oz. per 80,000 seeds)		
Chinch Bug	0.25 - 0.50	1.13 - 2.26		
Corn Flea Beetle				
Corn Leaf Aphid				
Cutworm, Black				
Grape Colaspis				
Seedcorn Maggot				
Southern Corn Leaf Beetle				
Southern Corn Rootworm				
Southern Green Stinkbug				
Storage Pests* (including Indian meal moth, Lesser				
grain borer, Red flour beetle, Rice weevil, and Rusty				
grain beetle)				
Sugarcane Beetle				
White Grub (including European, Chafer larvae,				

		Page 5 of 10
May/June beetle larvae, and Japanese beetle larvae)		
Thrips		
Wireworm		
Corn Flea Beetle (through first true seed leaf)	0.125	0.57
Seedcorn Maggot**		
Storage Pests* (including Indian meal moth, Lesser		
grain borer, Red flour beetle, Rice weevil, and Rusty		
grain beetle)		
White Grub** (including European, Chafer larvae,		
May/June beetle larvae, and Japanese beetle larvae)		
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^{*}It is recommended that seed with existing populations of storage pests be fumigated prior to treating and bagging seed.

^{**}For seed protection only.

Delinted Only)		
Insect Pests	Product Rate (fl. oz. per 100,000 Seed)	Product Rate (mg a.i. per seed)
Aphids	2.0	0.353
Cutworm, Black		
Early Season Thrips		
Storage Pests* (including Indian meal moth,		
Lesser grain borer, Red flour beetle, Rice		
weevil, and Rusty grain beetle)		

^{*}It is recommended that seed with existing populations of storage pests be fumigated prior to treating and bagging seed.

^{**}Not registered for use in California.

CARROT		
Insect Pests	Product Rate (Grams a.i. per 1,000 seed)	Product Rate (fl. oz. per 1,000 seed)
Carrot Rust Fly	0.0338 - 0.0675	0.0019 - 0.0038

LEAFY GREENS	
Subgroup 44 (Short Season Crops)	

Insect Pests	Product Rate (mg a.i. per seed)	Product Rate (fl. oz. per 100 lbs. seed*)	Short Season Crops
Aphids Leafminers (Suppression)	0.025 - 0.05	66.6 - 133.2	Spring Mix Lettuce, Lettuce
		6.4 - 12.9	Baby Spinach
		56.6 - 113.4	Amaranth
		36.9 - 73.7	Arugula
		23.0 - 46.1	Chervil
		56.6 - 113.4	Edible-Leaved Chrysanthemum
			Garland Chrysanthemum
		24.4 - 48.9	Corn Salad
		27.2 - 54.5	Garden Cress
			Upland Cress
		4.9 - 9.9	Dandelion
		46.1 - 92.1	Dock
		60.4 - 120.9	Endive
		18.9 - 37.8	Orach
		41.7 - 83.3	Parsley
		154.2 - 308.5	Garden Purslane
			Winter Purslane
		34.9 - 68.0	Radicchio

Each fl. oz. of **Sharda Clothianidin 48% FS** contains 17.7g of clothianidin.

*Fl. oz. per 100 lbs. seeds is calculated based on the following seed size (seeds/pound): Lettuce - 469,933; Spinach - 45,360; Amaranth - 400,000; Arugula - 260,000; Chervil - 162,532; Chrysanthemum - 400,000; Corn Salad - 172,400; Cress - 192,320; Dandelion - 35,000; Dock - 325,000; Endive - 426,400; Orach - 133,329; Parsley - 293,920; Purslane - 1,088,400 - Radicchio, 240,000.

		IART

Maximum seeding rates are based on the application rate and range from 120,000 - 3.6 million seeds per acre.

Maximum seeding rates are based on the application rate and range from 120,000 - 3.6 million seeds per acre.		
Application Rate (mg a.i. per seed)	Maximum Seeding Rate (seeds per acre)	
0.025	3,600,000	
0.05	1,800,000	
0.15	600,000	
0.4	225,000	
0.75	120,000	

LEAFY GREENS
Subgroup 4A (Full Season Cro

Subgroup 4A (Full Season Crops)			
Insect Pests	Product Rate (mg a.i. per seed)	Product Rate (fl. oz. per 100 lbs. seed*)	Full Season Crops
Aphids Leafminers (Suppression)	0.4 - 0.75	1065.4 - 1998.3	Leaf and Romaine Lettuce Head Lettuce**
	0.15	38.6	Spinach New Zealand Spinach Vine Spinach

Each fl. oz. of **Sharda Clothianidin 48% FS** contains 17.7g of clothianidin.

^{**}For high application rate of 0.4 - 0.75 mg a.i. per seed for lettuce, incorporate **Sharda Clothianidin 48% FS** into pelleting process. Minimum pelleting build-up weight of 40X is required for the highest rate of 0.75 mg a.i. per seed. The minimum pelleting build up weight is allowed to be reduced proportionally build up = 40X (target rate/0.75) for the lower rate. **DO NOT** apply the product on the raw seeds.

RATE GUIDE CHART			
Maximum seeding rates are based on the application rate and range from 120,000 - 3.6 million seeds per acre.			
Application Rate (mg a.i. per seed) Maximum Seeding Rate (seeds per acre)			
0.025	3,600,000		
0.05 1,800,000			
0.15 600,000			
0.4 225,000			
0.75 120,000			

LEEK		
Insect Pests	Product Rate (Grams a.i. per 1,000 seed)	Product Rate (fl. oz. per 1,000 seed)
Onion Maggot	0.2	0.01129
Seedcorn Maggot		
Thrips		

ONION (Bulb)		
Insect Pests	Product Rate (Grams a.i. per 1,000 seed)	Product Rate (fl. oz. per 1,000 seed)
Onion Maggot	0.118 - 0.18	0.00666 - 0.01016
Seedcorn Maggot		
Thrips		

ONION (Bunching)		
Insect Pests	Product Rate (Grams a.i. per 1,000 seed)	Product Rate (fl. oz. per 1,000 seed)
Onion Maggot	0.09 - 0.106	0.00508 - 0.00598
Seedcorn Maggot		
Thrips		

RICE*		
Insect Pests	Product Rate (fl. oz. per 100 lbs. seed)	
Aphid	1.93	
Black Bug		
Chinch Bug		
Grape Colaspis		
Rice Water Weevil		
Thrips		

Application:

Provides early season protection against listed pests.

Restrictions:

- DO NOT apply to Wild Rice.
- Sharda Clothianidin 48% FS is to be used only as a dry-seeded rice seed treatment.
- DO NOT use Sharda Clothianidin 48% FS in areas where rice/crawfish aquaculture practices are in place or in or near fish farms, shrimp, prawn or crab pond, or nursery operations.
- **Sharda Clothianidin 48% FS** is not to be followed by a spray treatment of another neonicotinoid insecticide. Follow approved guidelines established for insect resistance management by consulting your local extension pest management expert.

^{*}fl. oz. per 100 lbs. seeds is calculated based on the following seed size (seeds/pound): Lettuce - 469,933; Spinach - 45,360.

*Not registered for use in California.

SORGHUM*			
Insect Pests	Product Rate (fl. oz. per 100 lbs. seed)	Product Rate (mg a.i. per seed)**	
Aphid (including Greenbug, Yellow sugarcane aphid, Corn leaf aphid, and English grain aphid)	5.1 - 6.4	0.05 - 0.06	
Black Granulate Cutworm			
Chinch Bugs			
White Grubs			
Wireworms			
*Not registered for use in California.			
**Rate is calculated based on number of seeds/lb. averages of sorghum (18,000).			

SOYBEAN*		
Insect Pests	Product Rate (fl. oz. per 140,000 seeds)	Product Rate (mg a.i. per seed)
Aphids	0.87	0.11
Bean Leaf Beetle		
Grape Colaspis		
Leafhoppers		
Seed Corn Maggot		
Three-Cornered Alfalfa Hopper		
Thrips		
White Grubs		
Wireworm		
*Not registered for use in California.		

SUGARBEET			
Insect Pests	Product Rate (fl. oz. per 100,000 seed)	Product Rate (mg a.i. per seed)	
Black Bean Aphid	3.4	0.603	
Cutworms			
Flea Beetle			
Garden Springtail			
Sugarbeet Leafhopper			
Sugarbeet Leafminer			
Sugarbeet Root Maggot			
Wireworm			

Application:

- Protection against beet leafhopper injury aids in reducing potential spread of beet curly top virus, vectored by beet leafhopper.
- Apply Sharda Clothianidin 48% FS to seed with a coating system giving a minimum weight gain build-up of approximately 30%.

ON FARM SEED TREATMENT

CEREAL GRAINS (Except Corn, Rice, Sorghum, and Wild Rice) Barley, Buckwheat, Millet (pearl and prosso), Oats, Rye, Teosinte, Triticale, and Wheat				
Insect Pests	Product Rate (fl. oz. per 100 lbs. seed)	Product Rate (mg a.i. per seed)*		
Wireworm	0.25 - 1.79	0.00324 - 0.02318		
Aphid (including Bird cherry-oat, English grain, Greenbug, and Russian wheat aphid)	0.75 - 1.79	0.00971 - 0.02318		
Grasshopper Hessian Fly	1.79	0.02318		

Application:

- For wireworm seed protection, use a 0.25 fl. oz. per 100 lbs. seed rate or higher, depending on field history and site populations.
- For Hessian Fly protection to wheat seedlings in the Fall season, use 1.79 fl. oz. per 100 lbs. seed.
- For maximum effectiveness, treat seed uniformly. Use the higher rate to provide increased length of protection and from heavy insect pressure and to reduce potential spread of Barley yellow dwarf virus due to aphid vectors.
- Grasshopper feeding damage to seedling plants under low to moderate insect pressure will be reduced when **Sharda Clothianidin 48% FS** is used. Treated seed may be planted as a 50 60 foot border around the edges of the crop field as a barrier to grasshoppers advancing into the interior of the field.

Restriction:

- Regardless of application method (seed treatment, soil, or foliar), DO NOT apply more than 0.2 lb. a.i. clothianidin per acre per calendar year.
- *Rate is calculated based on number of seeds/lb. averages of wheat (13,700).

ON FARM SEED-PIECE TREATMENT

POTATO		
Insect Pests	Product Rate (fl. oz. per 100 lbs. seed)	Product Rate (mg a.i. per seed)*
Wireworm (seed-piece protection only)	0.32	7.1
Aphid (including potato, green peach, foxglove, and buckthorn aphids) Colorado Potato Beetle Potato Leafhopper Potato Flea Beetle (overwintered adults and suppression of second generation)	0.16 - 0.32	3.55 - 7.1

Application:

- Apply only in areas with adequate ventilation or in areas that are equipped to remove spray mist or dust.
- Apply specified dosage as a diluted spray onto seed pieces using a shielded spray system that is well contained and will prevent the loss of any liquid.
- Agitate or stir spray solution as needed. For optimal insect control, good coverage of the seed pieces is required.
- As part of the seed cutting and treating process, treatment and/or an inert absorbent ingredient is recommended to improve suberization.
- Plant seed pieces as soon as possible after cutting and treating.
- Consult local specialists, Sharda USA LLC representative or dealer for information relevant to your area.
- For extended residual control of pests other than wireworm, apply the higher rate.

Restrictions:

- DO NOT enter or allow worker re-entry into treated areas during the restricted entry interval of 12 hours.
- Regardless of formulation or type of application (seed treatment, soil, or foliar), **DO NOT** apply more than a total of 0.2 lb. a.i. clothianidin per acre per calendar year.
- DO NOT apply any subsequent application of a Group 4 Insecticide (i.e., in-furrow or foliar application) following treatment with Sharda Clothianidin 48% FS.
- DO NOT dilute with any more than 6 parts water to 1 part Sharda Clothianidin 48% FS.
- *Rate is calculated based on number of seeds/lb. averages of potato seed pieces (8).

SEED TAG LABELING

The Federal Seed Act requires that the container of seed treated with **Sharda Clothianidin 48% FS** must be labeled with the following statements:

- This seed has been treated with:
 - Sharda Clothianidin 48% FS, which contains 48.0% clothianidin.
- **DO NOT** use treated seed for food, feed, or oil production.

In addition, the U.S. Environmental Protection Agency requires the following statements on the container of seed treated with **Sharda Clothianidin 48% FS**:

- Store treated seeds away from food and feedstuffs.
- **DO NOT** allow children, pets, or livestock to have access to treated seed.
- Wear long-sleeved shirt, long pants, and chemical-resistant gloves when handling treated seed.
- Excess treated seed may be used for ethanol production only if (1) by-products are not used for livestock feed and (2) no measurable residues of pesticide remain in ethanol by-products that are used in agronomic practice.
- Treated seeds exposed on soil surface may be hazardous to wildlife. Cover or collect treated seeds spilled during loading.
- Dispose of all excess treated seed. Leftover treated seed may be double sown around the headland or buried away from water sources in accordance with local requirements.
- DO NOT contaminate water bodies when disposing of planting equipment wash waters.
- Dispose of seed packaging or containers in accordance with local requirements. **DO NOT** use empty seed bags for any other purpose.
- This compound is highly toxic to bees exposed directly (contact). Ensure that planting equipment is functioning properly in accordance with manufacturing recommendations to minimize seed coat abrasion during planting to reduce dust, which can drift to blooming crops or weeds.
- Rapeseed greens and seed grown or harvested from **Sharda Clothianidin 48% FS**-treated seed must not be used for feed or human consumption. Rapeseed grown and harvested from **Sharda Clothianidin 48% FS**-treated seed is only for industrial uses and cannot be used for edible oil or any other human/feed consumption.
- This compound is toxic to birds and mammals. Treated seeds exposed on soil surface may be hazardous to birds and mammals.
 Cover or collect treated seeds spilled during loading.
- In soybean, foliar sprays of clothianidin can be applied 45 days after planting Sharda Clothianidin 48% FS treated seeds for midto-late season foliar insects.
- For all other crops **DO NOT** apply a neonicotinoid insecticide foliar spray after planting treated seed. Follow approved guidelines

established for insect resistance management by consulting your local extension pest management expert.

- For Field Corn, Popcorn Immediate Plant-back: Cereal grains, Field corn, popcorn, sweet corn, rapeseed, canola, soybeans, root and tuber vegetable, 30-Day Plant-back: Grasses, non-grass animal feeds, dry beans, 8-Month Plant-back: Sugar cane, 12-Month Plant-back: Any crops without an earlier plant-back interval.
- For Sweet Corn, Canola, Rapeseed, and Sorghum Immediate Plant-back: Cereal grains, Field corn, popcorn, sweet corn, rapeseed, soybeans, canola, sorghum, root and tuber vegetables, 30-Day Plant-back: Grasses, non-grass animal feeds, dried beans, 4-Month Plant-back: Any crop without an earlier plant-back interval.
- For Soybeans Immediate Plant-back: Cereal grains, Field corn, popcorn, sweet corn, cotton, rapeseed, canola, soybeans, root and tuber vegetable, 30-Day Plant-back: Grasses, non-grass animal feeds, dry beans, 8-Month Plant-back: Sugar cane, 12- Month Plant-back: Any crops without an earlier plant-back interval.
- For Wheat, Barley, Oats, Rye, Triticale, and Potato Treated areas may be replanted with any crop specified on clothianidin label, or any crop for which a tolerance exists for clothianidin, as soon as practical following the last application. Areas planted with treated seed may be replanted immediately with cotton, corn, rapeseed, sorghum; sugar beet, potato, cereal grains (Crop Group 15 except rice), canola, and the following vegetable crops: root vegetables (Crop Group 1), bulb vegetables (Crop Group 3), leafy green vegetables (Crop Group 4A), Brassica (cole) leafy vegetables (Crop Group 5), fruiting vegetables (Crop Group 8), cucurbit vegetables (Crop Group 9). These areas may also be replanted after 30 days with soybeans, dried beans, and dried peas. DO NOT plant any other crop in the treated area for at least 1 year after treated seeds are planted.
- Follow-up foliar sprays of registered insecticide may be needed under heavy pest pressure. Consult your local Extension office for recommendations.
- **DO NOT** graze or feed soybean forage and hay to livestock.
- Regardless of method of application (seed treatment, soil or foliar), **DO NOT** apply more than 0.2 lb. of a.i. clothianidin per acre per calendar year.
- Not for use on sorghum or rice seed in the State of California.
- Sharda Clothianidin 48% FS is to be used only as a dry-seeded rice seed treatment.
- **DO NOT** use **Sharda Clothianidin 48% FS** in areas where rice/crawfish aquaculture practices are in place or in or near fish farms, shrimp, prawn or crab pond, or nursery operations.
- For canola and rapeseed: Treated at the rate of XX fl. oz. per 100 lbs. of seed will result in XX grams of clothianidin per 100 lbs. of seed
- For broccoli: Treated at the rate of XX fl. oz. per 1,000 seed will result in XX grams of clothianidin per 1,000 seed.
- For carrot: Treated at the rate of XX fl. oz. per 1,000 seed will result in XX grams of clothianidin per 1,000 seed.
- For corn (field and pop): This seed has been treated at the rate of XX mg a.i. per seed.
- For corn for the pest insect Southern corn billbug: Follow up foliar sprays of a locally registered insecticide may be needed under heavy pest pressure. Consult your local Extension Office for recommendations.
- For corn (sweet): This seed has been treated at the rate of XX mg a.i. per seed.
- For cotton: Treated at the rate of XX fl. oz. per 100 lbs. of seed will result in XX grams of clothianidin per 100 lbs. of seed.
- For leafy greens: Treated at the rate of XX fl. oz. per 100 lbs. of seed will result in XX mg of clothianidin per seed.
- For leek: Treated at the rate of XX fl. oz. per 1,000 seed will result in XX grams of clothianidin per 1,000 seed.
- For onion (bulb): Treated at the rate of XX fl. oz. per 1,000 seed will result in XX grams of clothianidin per 1,000 seed.
- For onion (bunching): Treated at the rate of XX fl. oz. per 1,000 seed will result in XX grams of clothianidin per 1,000 seed.
- For rice: Treated at the rate of XX fl. oz. per 100 lbs. of seed will result in XX lbs. of clothianidin per 100 lbs. of seed.
- For sorghum: Treated at the rate of XX fl. oz. per 100 lbs. of seed will result in XX grams of clothianidin per 100 lbs. of seed.
- For soybean: This seed has been treated with XX mg clothianidin per seed.
- For sugarbeet: Treated at the rate of XX fl. oz. per 100,000 seed will result in XX grams of clothianidin per 100,000 seed.
- For wheat, barley, buckwheat, millet (pearl and prosso), oats, rye, teosinte, or triticale: Treated at the rate of XX fl. oz. per 100 lbs. of seed will result in XX grams of clothianidin per 100 lbs. of seed.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in a cool, dry secured storage area.

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.

CONTAINER HANDLING:

Nonrefillable HDPE Container [Less Than or Equal to 5 Gallons]: 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 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.

[[Nonrefillable HDPE Container Greater Than 5 Gallons]: 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

Page 10 of 10 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. Offer for recycling if available or puncture and dispose of empty container in a sanitary landfill or by incineration.]

[[Refillable HDPE Container For Bulk and Mini-Bulk Containers]: 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.

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