



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460**

**OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION**

June 27, 2023

Matthew Feinberg  
Product Registration Manager  
BASF  
26 Davis Drive  
Research Triangle Park, NC 27709

**Subject:** Label Amendment – Revise first aid, PPE, environmental controls, and other minor label changes.  
Product Name: BAS 494 ST  
EPA Registration Number: 7969-460  
Application Date: March 14, 2023  
Decision Number: 591170

Dear Mr. Feinberg:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. “To distribute or sell” is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

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

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Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

If you have any questions, please contact Lindsay DeMers via email at [demers.lindsay@epa.gov](mailto:demers.lindsay@epa.gov).

Sincerely,

A handwritten signature in cursive script that reads "Shaja B. Joyner".

Shaja B. Joyner, Product Manager 20  
Fungicide-Herbicide Branch  
Registration Division 7505T

Enclosure: stamped "accepted" label



We create chemistry

Fluopyram	Group	7	Fungicide
Bacillus firmus strain I-1582	Group	UNB	Nematicide

# BAS 494 ST

Alternate Brand Names: Copeo® Duo Seed Treatment, Effectra® Seed Treatment, ILEVO® DUO Seed Treatment, ILEVO® VOTIVO® Seed Treatment

**Seed treatment with 2 modes of action for use on corn, cotton, sorghum, soybean, and wheat for the protection against damage caused by early season plant pathogenic nematodes and for the promotion of plant growth. As a soybean seed treatment, it also provides protection from seedling infections by *Fusarium virguliforme*, the causal agent of Sudden Death Syndrome.**

**Active Ingredients:**

fluopyram: <i>N</i> -[2-[3-chloro-5-(trifluoromethyl)-2-pyridinyl]ethyl]-2-(trifluoromethyl)benzamide	29.5%
Bacillus firmus strain I-1582	11.5%
<b>Other Ingredients:</b>	59.0%
<b>Total:</b>	100.0%

Contains 500 g ai/liter or 4.17 lbs ai/gallon  
- 3 lbs of fluopyram per gallon (360 g fluopyram per liter)  
- 1.17 lbs of Bacillus firmus strain I-1582 per gallon (140 g ai/liter) and a minimum of 4.0 x 10<sup>9</sup> cfu/ml of product

**EPA Reg. No. 7969-460**  
FLOWABLE SUSPENSION

**EPA Est. No.**

## KEEP OUT OF REACH OF CHILDREN CAUTION/PRECAUCION

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

See inside for complete **First Aid, Precautionary Statements, Directions For Use, Conditions of Sale and Warranty**, and state-specific crop and/or use site restrictions.

**In case of an emergency endangering life or property involving this product, call day or night 1-800-832-HELP (4357).**

### Net Contents:

BASF Corporation  
26 Davis Drive, Research Triangle Park, NC 27709

<b>ACCEPTED</b>
06/27/2023
<small>Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 7969-460</small>

<b>FIRST AID</b>	
<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Immediately call a poison control center or doctor for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• <b>DO NOT</b> induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• <b>DO NOT</b> give anything by mouth to an unconscious person.</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 to 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 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 to 20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If inhaled</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>HOTLINE NUMBER</b>	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact BASF Corporation for medical treatment information: 1-800-832-HELP (4357).	
<b>NOTE TO PHYSICIAN:</b> Treat symptomatically.	

## Precautionary Statements

### Hazards to Humans and Domestic Animals

**CAUTION.** Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

### Personal Protective Equipment (PPE)

**Workers involved with treating the seed (e.g. connecting and disconnecting hoses and transfer pumps, mixing, equipment calibration, etc.); baggers and bag sewers; cleaners/repairers of seed treatment equipment; and others exposed to the concentrate must wear:**

- Long-sleeve shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves made out of: barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene, polyvinyl chloride ≥ 14 mils or Viton ≥ 14 mils
- Wear a minimum of a NIOSH-approved particulate filtering facepiece respirator with any N, R, or P filter; OR a NIOSH-approved elastomeric particulate respirator with any N, R, or P filter; OR a NIOSH-approved powered air-purifying respirator with an HE filter. (Repeated exposures to high concentrations of microbial proteins can cause allergic sensitization.)

### Engineering Controls

When engineering controls that meet the OSHA requirements defined in 29 CFR Part 1910.1000 are used the respirator requirement may be waived or modified as specified in 29 CFR Part 1910.1000.

### User Safety Requirements

#### USER SAFETY RECOMMENDATIONS

**Users should:**

- 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.

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

### Environmental Hazards

For terrestrial uses: **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. This product may impact surface water quality due to runoff of rainwater. This is especially true for poorly draining soils and soils with shallow groundwater. This product is classified as having high potential for reaching surface water via runoff for several months or more after application. A level, well-maintained vegetative buffer strip

between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of fluopyram. Runoff of this product will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours. Sound erosion control practices will reduce this product's potential to reach aquatic sediment via runoff.

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.

Treated seed exposed on soil surface may be hazardous to wildlife. Cover or collect seed spilled during loading.

## Directions For Use

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

Read the entire label and observe all label directions and precautions before use.

## STORAGE AND DISPOSAL

**DO NOT** contaminate water, food or feed by storage, disposal or cleaning of equipment.

### Pesticide Storage

Store in original container away from feed and food. Store in cool, dry area. **DO NOT** store in direct sunlight. **DO NOT** allow prolonged storage in temperatures that exceed 86° F (30° C) or in temperatures that fall below 32° F (0° C).

### Pesticide Disposal

To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

### Container Handling

#### Dilutable Seed Treatment Products in Nonrefillable Plastic Containers

##### Rigid nonrefillable containers (equal to or less than 5 gallons)

**Nonrefillable Container. DO NOT** reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

(continued)

## STORAGE AND DISPOSAL (continued)

### Container Handling (continued)

#### Dilutable Seed Treatment Products in Nonrefillable Plastic Containers (continued)

##### Rigid nonrefillable containers

##### (equal to or less than 5 gallons) (continued)

**Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

##### Rigid nonrefillable containers

##### that are too large to shake (i.e., with capacities greater than 5 gallons or 50 lbs)

**Nonrefillable Container. DO NOT** reuse or refill this container. After emptying product from container, either return container to BASF, or rinse and either recycle or dispose of the container as follows:

#### Bottom discharge Intermediate Bulk Container (IBC) (e.g. Schuetz Caged IBC or Snyder Square Stackable)

Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal. Completely remove the top lid of the IBC. Use water pressurized to at least 40 PSI to rinse all interior portions. Continuously pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

#### Top discharge IBC, drums, kegs (e.g. Snyder 120 Next Gen, Bonar B120, drums, and kegs)

Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. To triple rinse the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container at least 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

## In Case of Spill

In case of large-scale spill of this product, call:

- CHEMTREC 1-800-424-9300
- BASF Corporation 1-800-832-HELP (4357)

In case of medical emergency regarding this product, call:

- Your local doctor for immediate treatment
- Your local poison control center (hospital)
- BASF Corporation 1-800-832-HELP (4357)

### Steps to take if material is released or spilled:

- Wear Personal Protective Equipment (PPE) and avoid exposure when managing a spill. (See **Precautionary Statements** section of this label for required PPE.)
- Dike and contain the spill with inert, absorbent material (e.g., sand, earth) and transfer liquid and solid diking material to separate containers for disposal. Small-scale spills of this product (that can be cleaned up with a typical spill kit) may be applied to labeled sites.
- Remove contaminated clothing, and wash affected skin areas with soap and water.
- Wash clothing before reuse.
- Keep spill out of all sewers and open bodies of water.

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## Product Information

- **BAS 494 ST** is a systemic and biological seed treatment that when applied to the seed, aids in protecting the seed and seedling against damage caused by early season plant pathogenic nematodes and promotes plant growth.
- The use of **BAS 494 ST** can protect against early season infection by *Fusarium virguliforme*, the causal agent of Sudden Death Syndrome, in soybean.
- In areas of high nematode infestation additional control measures may be warranted.

## Use Restrictions

- For use only in commercial seed treatment equipment.
- Not for use in hopper box, planter box, slurry box, or other on-farm seed treatment applications.
- **DO NOT** use this product except as directed on this label or on other BASF supplemental labeling for this product.
- **DO NOT** broadcast plant seeds.
- **DO NOT** apply more than 0.45 lb ai/A of fluopyram per year (including seed treatment, foliar, in-furrow, or band-ed applications).
- Refer to the specific use directions and restrictions in the **Detailed Use Directions** section.
- This product does not contain colorant. The purchaser of this product is responsible for ensuring that all seed treated with this product are adequately dyed with a suitable color to prevent its accidental use as food for man or feed for animals. Refer to 21CFR, Part 2.25. Any

colorant added to treated seed must be cleared for use under 40CFR, Part 153.155.

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## Fungicide Resistance Management (FRAC)

For resistance management, **BAS 494 ST** contains a **Group 7** fungicide. Any fungal population may contain individuals naturally resistant to **BAS 494 ST** and other **Group 7** fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay fungicide resistance, take one or more of the following steps:

- Rotate the use of **BAS 494 ST** or other **Group 7** fungicides within a growing season sequence with different groups that control the same pathogens.
- Use tank mixtures with fungicides from a different group that are equally effective on the target pest when such use is permitted. Use at least the minimum application rate as labeled by the manufacturer.
- Adopt an integrated disease management program for fungicide use that includes scouting, uses historical information related to pesticide use, and crop rotation, and which considers host plant resistance, impact of environmental conditions on disease development, disease thresholds, as well as cultural, biological and other chemical control practices.
- Where possible, make use of predictive disease models to effectively time fungicide applications. Note that using predictive models alone is not sufficient to manage resistance.
- Monitor treated fungal populations for resistance development.
- Contact your local extension specialist or certified crop advisor for any additional pesticide resistance-management and/or IPM recommendations for specific crops and pathogens.
- For further information or to report suspected resistance contact your BASF representative, pesticide distributor, or university extension specialist.

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## Application Instructions

Use **BAS 494 ST** in commercial seed treatment facilities with commercial or professional seed treatment application equipment only.

- Use good quality, well-conditioned seed free of chaff.
- Thorough and uniform seed coverage is required for optimum performance.
- Apply at specified rates with either seed treatment equipment that has “direct inject” or dedicated pump capabilities or in a water-based mixture using standard slurry seed treatment application equipment. Consult a seed treatment specialist about crop-specific slurry rates and seed treatment calibration and operation procedures. If applying in a water-based mixture mix only as much product as is needed for immediate application to seed.



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## Tank Mixing Other Products

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- **BAS 494 ST** can be used in combination with other registered BASF seed treatment fungicides and insecticides. Pretest for compatibility with other seed treatment products.
- 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.

### Compatibility Test

Before mixing components, always perform a compatibility jar test.

1. In a clean quart jar containing 1/2 the intended amount of water for a final slurry application rate, add the labeled rate of **BAS 494 ST** and follow with all intended tank mix components.
2. Add remaining balance of water. Total slurry volume depends on seed size and complete, uniform coverage of the seed, as well as the commercial seed treating application equipment used.
3. Mix well and allow to sit for one hour.
4. **Evaluate - DO NOT** use mixtures that curdle, precipitate, or gel.

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## Mixing Instructions

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When applied with seed treatment application equipment designed to treat seed utilizing a treatment slurry mixture:

- Add approximately 1/2 to 2/3 of the required water to the treatment slurry tank followed by the accompanying seed treatment products and **BAS 494 ST**.
- The order of product addition is dependent on the accompanying seed treatment products and application equipment used.
- Allow each slurry component to disperse completely prior to the next addition until a uniform suspension is obtained.
- After all slurry components have been added and dispersed completely, add the remaining 1/2 to 1/3 of required water for proper slurry volume and mix until uniform.
- **DO NOT** store mixed slurries for greater than 72 hours.
- Maintain adequate agitation until treatment slurry is applied.
- For additional instructions for use, slurry component mixing order, and other application suggestions contact your BASF representative.

## Detailed Use Directions

### All Crops

- For use only in commercial seed treatment equipment.
- Not for use in hopper box, planter box, slurry box, or other on-farm seed treatment applications.
- Apply with seed treatment equipment that has “direct inject” or dedicated pump capabilities or standard slurry-type.
- All seed treated with this product must be colored with an EPA-approved dye or colorant that imparts an unnatural color to the seed to help prevent the inadvertent use of treated seed for food, feed, or oil purposes.
- Treated seed must be labeled in accordance with the requirements of the Federal Seed Act.
- **DO NOT** broadcast plant seeds.
- **DO NOT** apply more than 0.45 lb ai/A of fluopyram per year (including seed treatment, foliar, in-furrow, or banded applications).

### Corn

**Soilborne Nematodes:** ring (*Criconebella* spp.), root lesion (*Pratylenchus* spp.), southern root-knot (*Meloidogyne incognita*), sting (*Belonolaimus* spp.), stubby-root (*Paratrichodorus* spp.)

#### BAS 494 ST Rate

# seeds/kg (# seeds/lb)	ml/100 kg seed (fl ozs/100 lbs seed)	ml/80,000 seeds <sup>1</sup> (fl ozs/80,000 seeds)	mg ai/seed <sup>1</sup>	g/A <sup>2</sup> (lb/A)
3,706 (1,681)	25.94 to 259.4 (0.4 to 3.98)	5.6 to 56.0 (0.19 to 1.89)	0.035 to 0.35 [delivers 0.025 to 0.25 mg fluopyram/seed]	1.41 to 14.09 (0.0031 to 0.031) [delivers 0.0022 to 0.022 lb fluopyram/A]

<sup>1</sup> Rate is calculated based on number of seeds/kg average of corn (3,706).

<sup>2</sup> Based on seeding rate of 40,250 seeds/acre [(40,250 seeds/A) x (mg ai/seed) x (g/1,000 mg)]



## Cotton

**Soilborne Nematodes:** lance (*Hoplolaimus* spp.), reniform (*Rotylenchulus reniformis*), southern root-knot (*Meloidogyne incognita*)

### BAS 494 ST Rate

# seeds/kg (# seeds/lb)	ml/100 kg seed (fl ozs/100 lbs seed)	ml/100,000 seeds <sup>1</sup> (fl ozs/100,000 seeds)	mg ai/seed <sup>1</sup>	g/A <sup>2</sup> (lb/A)
9,921 (4,500)	476.19 to 972.23 (7.3 to 14.91)	48 to 98 (1.62 to 3.31)	0.24 to 0.49 [delivers 0.175 to 0.35 mg fluopyram/seed]	20.4 to 41.6 (0.0449 to 0.0917) [delivers 0.033 to 0.066 lb fluopyram/A]

<sup>1</sup> Rate is calculated based on number of seeds/kg average of cotton (9,921).

<sup>2</sup> Based on seeding rate of 85,000 seeds/acre [(85,000 seeds/A) x (mg ai/seed) x (g/1,000 mg)]

## Sorghum

**Soilborne Nematodes:** ring (*Criconemella* spp.), root lesion (*Pratylenchus* spp.), southern root-knot (*Meloidogyne incognita*), sting (*Belonolaimus* spp.), stubby-root (*Paratrichodorus* spp.)

### BAS 494 ST Rate

# seeds/kg (# seeds/lb)	ml/100 kg seed (fl ozs/100 lbs seed)	ml/100,000 seeds <sup>1</sup> (fl oz/100,000 seeds)	mg ai/seed <sup>1</sup>	g/A <sup>2</sup> (lb/A)
39,683 (18,000)	277.78 to 555.56 (4.26 to 8.52)	7.0 to 14 (0.24 to 0.47)	0.035 to 0.07 [delivers 0.025 to 0.05 mg fluopyram/seed]	3.5 to 7 (0.007 to 0.0154) [delivers 0.006 to 0.01 lb fluopyram/A]

<sup>1</sup> Rate is calculated based on number of seeds/kg average of sorghum (39,683).

<sup>2</sup> Based on seeding rate of 100,000 seeds/acre [(100,000 seeds/A) x (mg ai/seed) x (g/1,000 mg)]

## Soybean

**Soilborne Nematodes:** lance (*Hoplolaimus* spp.), reniform (*Rotylenchulus reniformis*), root lesion (*Pratylenchus* spp.), southern root-knot (*Meloidogyne incognita*), soybean cyst (*Heterodera glycines*)

### BAS 494 ST Rate

# seeds/kg (# seeds/lb)	ml/100 kg seed (fl ozs/100 lbs seed)	ml/140,000 seeds <sup>1</sup> (fl ozs/140,000 seeds)	mg ai/seed <sup>1,3</sup>	g/A <sup>2</sup> (lb/A)
5,662 (2,550)	118.06 to 382.28 (1.81 to 5.86)	29.40 to 95.20 (0.99 to 3.22)	0.105 to 0.34 [delivers 0.075 to 0.25 mg fluopyram/seed]	26.25 to 85.0 (0.058 to 0.187) [delivers 0.04 to 0.14 lb fluopyram/A]

**DO NOT** graze or feed soybean forage and hay to livestock after treating with **BAS 494 ST**.

<sup>1</sup> Rate is calculated based on number of seeds/kg average of soybean (5,662).

<sup>2</sup> Based on seeding rate of 250,000 seeds/acre [(250,000 seeds/A) x (mg ai/seed) x (g/1,000 mg)]

<sup>3</sup> Additional seed treatment products containing fluopyram can be applied to achieve a total of 0.15 mg fluopyram per seed to provide protection against Sudden Death Syndrome.

**Diseases:** Sudden death syndrome (SDS) caused by *Fusarium virguliforme*, early season Septoria brown spot (*Septoria glycines*)

**Soilborne Nematodes:** lance (*Hoplolaimus* spp.), reniform (*Rotylenchulus reniformis*), root lesion (*Pratylenchus* spp.), southern root-knot (*Meloidogyne incognita*), soybean cyst (*Heterodera glycines*)

### BAS 494 ST Rate

# seeds/kg (# seeds/lb)	ml/100 kg seed (fl ozs/100 lbs seed)	ml/140,000 seeds (fl ozs/140,000 seeds)	mg ai/seed <sup>1</sup>	g/A <sup>2</sup> (lb/A)
5,662 (2,550)	236.11 to 382.28 (3.62 to 5.86)	58.8 to 95.20 (1.99 to 3.22)	0.21 to 0.34 [delivers 0.15 to 0.25 mg fluopyram/seed]	52.5 to 85.0 (0.116 to 0.187) [delivers 0.08 to 0.14 lb fluopyram/A]

**DO NOT** graze or feed soybean forage and hay to livestock after treating with **BAS 494 ST**.

<sup>1</sup> Rate is calculated based on number of seeds/kg average of soybean (5,662).

<sup>2</sup> Based on seeding rate of 250,000 seeds/acre [(250,000 seeds/A) x (mg ai/seed) x (g/1,000 mg)]

## Wheat

**Soilborne Nematodes:** ring (*Criconebella* spp.), root lesion (*Praylenchus* spp.), root-knot (*Meloidogyne* spp.), sting (*Belonalaimus* spp.), stubby-root (*Paratrichodorus* spp.)

### BAS 494 ST Rate

# seeds/kg (# seeds/lb)	ml/100 kg seed (fl ozs/100 lbs seed)	ml/100,000 seeds (fl oz/100,000 seeds)	mg ai/seed <sup>1</sup>	g/A <sup>2</sup> (lb/A)
31,967 (14,500)	223.77 to 447.53 (3.43 to 6.86)	7.0 to 14.0 (0.24 to 0.47)	0.035 to 0.07 [delivers 0.025 to 0.05 mg fluopyram/seed]	81.9 to 163.8 (0.18 to 0.36) [delivers 0.13 to 0.26 lb fluopyram/A]

<sup>1</sup> Rate is calculated based on number of seeds/kg average of wheat (31,967).

<sup>2</sup> Based on seeding rate of 2,340,000 seeds/acre [(2,340,000 seeds/A) x (mg ai/seed) x (g/1,000 mg)]

## SEED BAG TAG

The Federal Seed Act requires that the container of seed treated with **BAS 494 ST** must be labeled with the following statements:

- This seed has been treated with **BAS 494 ST**, which contains **29.5% of fluopyram** and **11.5% Bacillus firmus strain I-1582**.
- **DO NOT** use treated seed for food, feed, or oil purposes.

User is responsible for ensuring that the seed bag meets all requirements under the Federal Seed Act.

- 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 made out of: barrier laminate, butyl rubber  $\geq 14$  mils, nitrile rubber  $\geq 14$  mils, neoprene rubber  $\geq 14$  mils, natural rubber  $\geq 14$  mils, polyethylene, polyvinyl chloride  $\geq 14$  mils or Viton  $\geq 14$  mils 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. Promptly cover or collect treated seed spilled during loading or planting.
- Dispose of all excess treated seed. Leftover treated seed may be buried away from water sources in accordance with local requirements.
- **DO NOT** contaminate water bodies when disposing of planting equipment washwaters.
- Treated seed must be planted into the soil at depth greater than 1 inch.
- Dispose of seed packaging or containers in accordance with local requirements. **DO NOT** use empty seed bags for any other purpose.
- To reduce seed dust which can drift onto blooming crops or weeds, ensure that planting equipment is functioning properly in accordance with manufacturer's specifications. Surplus seed or empty seed containers must be stored or disposed according to local federal regulations.
- Treat at manufacturer's specified rate.

## SEED BAG TAG *(continued)*

### • **Restrictions:**

- **DO NOT** graze or feed soybean forage and hay to livestock after treating with **BAS 494 ST**.
- **DO NOT** broadcast plant seeds.
- **DO NOT** apply more than 0.45 lb ai/A of fluopyram per year (including seed treatment, foliar, in-furrow, or banded applications).

### • **Rotational Crops Plant-back Restrictions:**

- The following crops can be replanted immediately following the last application of fluopyram: artichoke (globe); Brassica (cole) leafy vegetables (group 5); bulb vegetables (subgroup 3-07A and 3-07B); carrot; cereals (group 15) [which include: barley, buckwheat, field corn, popcorn, sweet corn, millet (pearl and proso), oats, rice; rye, sorghum, teosinte, triticale, and wheat]; citrus (group 10-10); cotton (subgroup 20C); cucurbits (group 9); dill seed; fruiting vegetables (group 8-10); ginseng; grapes and small vines (except fuzzy kiwifruit) (subgroup 13-07F); herb (subgroup 19A); hop; leafy vegetables (except watercress) (group 4); legume vegetables (except soybean, cowpea and dry peas); peanut; pome fruit (group 11-10); potato and other root, tuberous and corm vegetables (except sugar beet) (subgroup 1B and 1C); rapeseed (subgroup 20A); small berries (caneberries and bushberries) (subgroup 13-07A and 13-07B); soybean; stone fruits (group 12-12); strawberry and other low-growing berries, except cranberry (subgroup 13-07G); sugar beet; sunflower (subgroup 20B); tobacco; tree nut (group 14-12).
- Alfalfa can be planted after 14 days and sugarcane can be planted after 14 days in Region 3 - Florida and boot of Alabama.
- **DO NOT** rotate to crops other than those listed above.

## Conditions of Sale and Warranty

The **Directions For Use** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as the presence of other or untested or unapproved materials, seed of low quality or low vigor or low germination, use of the product in a manner inconsistent with its labeling, misapplication of the product, or weather conditions at planting or environmental conditions during seed storage, all of which are beyond the control of BASF CORPORATION ("BASF") or the Seller. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer.

BASF warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the **Directions For Use**, subject to the inherent risks, referred to above.

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