

#### U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs

Biopesticides and Pollution Prevention Division (7511P) 1200 Pennsylvania Ave., N.W.

Washington, D.C. 20460

### NOTICE OF PESTICIDE:

X Registration
Reregistration
(under FIFRA, as amended)

EPA Reg. Number:	Date of Issuance:	
264-1180	3/27/2015	
Term of Issuance: Conditional		
Name of Pesticide Product:		

Bay2000

Name and Address of Registrant (include ZIP Code):

Bayer CropScience LP P.O. Box 12014 Research Triangle Park, NC 27709

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Biopesticides and Pollution Prevention Division prior to use of the label in commerce. In any correspondence on this product, always refer to the above EPA Registration Number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA or the Act).

Registration is in no way to be construed as an endorsement or recommendation of this product by the U.S. Environmental Protection Agency (EPA). In order to protect health and the environment, the Administrator, on his or her 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 the 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 or registration review of your product when the EPA requires all registrants of similar products to submit such data.

Signature of Approving Official:	Date:
Shower Large	3/27/2015
Shannon Borges, Team Leader	
Microbial Pesticides Branch	
Biopesticides and Pollution Prevention Division (7511P)	
Office of Pesticide Programs	

- 2. Non-target Plant testing (OCSPP Guideline 885.4300) has been identified as a data need for *Bacillus pumilus* strain QST 2808 in a Final Work Plan and is proposed for inclusion in an upcoming Data Call-in (DCI) associated with registration review. For more information on this proposed data requirement, you may contact the Team Leader for microbial pesticides: <a href="http://www.epa.gov/oppbppd1/biopesticides/contacts\_bppd.htm">http://www.epa.gov/oppbppd1/biopesticides/contacts\_bppd.htm</a>.
- 3. Make the following labeling change before you release this product for shipment:
  - Revise the EPA Registration Number to read, "EPA Reg. No. 264-1180."
- 4. Submit one (1) copy of the final printed labeling for the record before you release this product for shipment.

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 FIFRA 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 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 Assurance.

Your release for shipment of this product constitutes acceptance of these conditions. If you fail to satisfy these data requirements, the EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 6(e). A stamped copy of the labeling is enclosed for your records. Please also note that the record for this product currently contains the following acceptable Confidential Statement of Formula (CSF):

• Basic CSF dated 03/26/2015

Any CSFs other than the CSF listed above are superseded.

Page 3 of 3 EPA Reg. No. 264-1180 OPP Decision No. 497228

If you have any questions, please contact Susanne Cerrelli of my team by phone at (703) 308-8077 or via email at cerrelli.susanne@epa.gov.

Sincerely,

Shannon Borges, Team Leader Microbial Pesticides Branch Biopesticides and Pollution Prevention Division (7511P)

Enclosure

### ACCEPTED

03/27/2015

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 264-1180

# **BAY2000**<sup>™</sup>

**Section A: Commercial Seed Treatment Uses** 

# **BAY2000**<sup>™</sup>

[USE IN APPLICATION MIXES WITH OTHER COMMERCIAL SEED TREATMENT PRODUCTS]

[A SYSTEMIC BIOLOGICAL SEED TREATMENT FOR SUPPRESSION OF SEEDLING AND ROOT DISEASES ON THE FOLLOWING SELECT AGRICULTURAL CROPS: CANOLA, RAPESEED, CORN, COTTON, CEREAL GRAINS, LEGUME VEGETABLES, AND RICE].

### **ACTIVE INGREDIENT:**

 Bacillus pumilus strain QST 2808
 1.38%

 OTHER INGREDIENTS:
 98.62%

 TOTAL:
 100.00%

(Contains a minimum of 1 x 109 cfu/g)

EPA Reg. No: 264-XXXX EPA Est.

### **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 the label, find someone to explain it to you in detail).

For MEDICAL and TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577
For PRODUCT USE Information Call 1-800-331-2867

FIRST AID		
	Move person to fresh air.	
IF INHALED:	• If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible.	
	Call a poison control center or doctor for further treatment advice.	
Take off contaminated clothing.		
IF ON SKIN OR CLOTHING:	Rinse skin immediately with plenty of water for 15-20 minutes.	
	Call a poison control center or doctor for further treatment advice.	
In case of emergency call toll free the Bayer CropScience Emergency Response Telephone No. 1-800-334-7577.		
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.		

[Note: All text in brackets is optional language for the final printed container label.] [USE OF PRODUCT INDICATES ACCEPTANCE OF CONIDTIONS FOR SALE AND WARRANTY] [Reference Statement for Booklets: For ADDITIONAL PRECAUTIONARY STATEMENTS [and DIRECTIONS FOR USE]: See Inside Booklet. See FIRST AID STATEMENT on the back panel.] [For complete CONTAINER DISPOSAL instructions, including containers that are too large to shake (i.e. with capacities greater than 5 gallons, see attached booklet]

### PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

### **CAUTION**

Harmful if inhaled. Avoid breathing spray mist. Avoid contact with skin or clothing. Remove and wash contaminated clothing before reuse. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals.

## PERSONAL PROTECTIVE EQUIPMENT (PPE) Applicators and Other Handlers

Workers involved with treating the seed (e.g. connecting and disconnecting hoses and transfer pumps, mixing, equipment calibration, etc.) and others exposed to the concentrate, and cleaners/repairers of seed treatment equipment must wear a long-sleeve shirt and long pants, shoes plus socks, waterproof gloves, and a dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95, or P-95.

Baggers and bag sewers must wear a long-sleeve shirt and long pants, shoes plus socks, waterproof gloves, and a dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95, or P-95.

Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

Follow manufacturer's instructions for cleaning and maintaining PPE. If no instructions are available, use detergent and hot water for washables. 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.
- Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should remove PPE immediately after handling this product.
- Users should wash the outside of gloves before removing.
- Users should as soon as possible, wash thoroughly and change into clean clothing.

### **ENVIRONMENTAL HAZARDS**

For Seed Treatment Use: 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. Cover spilled seed, or collect spilled seed from soil surface.

### **CONDITIONS FOR SALE AND WARRANTY**

### IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product at once for a refund of the purchase price.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties, and Limitations of Liability. These terms may only be modified by a written document signed by a duly authorized representative of Bayer CropScience LP.

Treatment of highly mechanically damaged seed, or seed of known low vigor and 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 Bayer CropScience LP, no claims are made to guarantee germination of carry-over seed.

**CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Bayer CropScience LP. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience LP is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCIENCE LP'S ELECTION, THE REPLACEMENT OF PRODUCT.

### DIRECTIONS FOR USE

### STOP - READ THE ENTIRE LABEL BEFORE 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. [For use only as described on the labeling. Not for isolation or deformulation. Do not culture.]

### **COMMERCIAL SEED TREATMENT USE DIRECTIONS**

Not for use on agricultural establishments in hopper-box, planter-box, slurry-box or other seed treatment applications at or immediately before planting.

### **BASIC USE INFORMATION**

BAY2000 contains bacteria that, when applied to seed, will germinate in the soil to colonize the developing root system and provide suppression of disease-causing organisms such as *Fusarium*, *Pythium* and *Rhizoctonia* that can attack plant roots. As a result of this biological protection, a vigorous root system is established by the plant, which often results in improved plant stand, plant health, and yield. For improved performance use BAY2000 in a program with other registered fungicides for seed treatment.

### **USE RATE DETERMINATION**

Carefully read and follow all label directions, use rates and restrictions. Prepare only the amount of product solution required to treat the amount of seed required.

### APPLICATION INSTRUCTIONS

[For Commercial Seed Treatment: BAY2000 as a seed treatment may be applied as a water-based slurry alone or with other registered seed treatment insecticides and fungicides through standard slurry or mist commercial seed treatment equipment.]

### **MIXING INSTRUCTIONS**

**MIXING**: BAY2000 may be mixed with other registered pesticides. This product cannot be mixed with any product with a prohibition against such mixing. When mixing BAY2000 with other registered pesticides, always read and follow all use directions, restrictions, and precautions of both BAY2000 and the mix partner(s). Use of the resulting mix must be in accordance with the more restrictive label limitations and precautions. Do not exceed label dosage rates.

**COMPATIBILITY:** Do not combine BAY2000 in the slurry with any product in which there has been no previous experience or use of the combination to show it is physically compatible, effective and non-injurious under your use conditions. BAY2000 is compatible with many commonly used pesticides but has not been fully evaluated with all of these. It is essential that before using BAY2000 in any tank mixture the compatibility of the mixture be established. Add BAY2000 at the labeled rate to a clean quart jar containing approximately one-half the amount of water intended for a final slurry application rate. Next, follow with all other tank mix components that will be used in the total slurry application. Add last the remaining balance of water. The total amount of volume is determined by the seed size and how much is necessary to ensure complete and uniform coverage and distribution on the seed, as well as the type of commercial seed treating application equipment that will be used.

DO NOT USE MIXTURES THAT CURDLE, PRECIPITATE, OR GEL. USE TANK MIXTURES IMMEDIATELY AFTER MIXING WITH ADEQUATE AGITATION.

### For Use as a Seed Treatment:

When using with other chemical insecticide or fungicide seed treatments: first add the chemical insecticides or fungicides to the slurry mix with approximately ½ of the required water. Slowly add the BAY2000 to the slurry until a suspension is obtained. Add the remainder of the water and maintain adequate agitation. **Do not store mixed slurries for more than 24 hours.** 

When using only BAY2000 seed treatment: Add ½ the required water to the slurry mix. Slowly add the BAY2000 to the slurry until a suspension is obtained. Add the remainder of the water and maintain adequate agitation. **Do not store mixed slurries for more than 24 hours**.

Note: This product does not contain dye and is not covered by an appropriate tolerance, tolerance exemption, or other clearance under the Federal Food, Drug and Cosmetic Act. To comply with 40 CFR 153.155, therefore, all seed treated commercially with this product must be colored with an EPA-approved dye or colorant of a suitable color to prevent accidental use as food for man or feed for animals.

### SPECIFIC CROP DIRECTIONS

## CROP USE DIRECTIONS Application Rates of BAY2000 for Seed Treatment

For suppression of seedling and root diseases on the following select agricultural crop seeds:

CANOLA, RAPESEED	
Disease	Product Rate (fl oz per 100 lb of seed)
Fusarium spp.	
Pythium spp.	0.3 – 5
Rhizoctonia spp.	

CORN Corn, Sweet; Corn, Feed; Corn, Field; Corn, Fuel; Corn, Pop	
Disease	Product Rate (fl oz per 100 lb of seed)
Fusarium spp.	
Pythium spp.	0.2 – 5
Rhizoctonia spp.	

COTTON Cotton, Short Staple; Cotton, Long Staple; Cotton, Upland; Cotton, Pima	
Disease	Product Rate (fl oz per 100 lb of seed)
Fusarium spp.	
Pythium spp.	0.2 – 3
Rhizoctonia spp.	

CEREAL GRAINS Amaranth, Grain; Sorghum, Grain; Barley, Grain; Oat, Grain; Wheat, Grain; Lupine Grain	
Disease	Product Rate (fl oz per 100 lb of seed)
Fusarium spp.	
Pythium spp.	0.1 – 3
Rhizoctonia spp.	

### LEGUME VEGETABLES

Beans Sprouts, Bean; Adzuki, Bean; Black, Blue Lake, Bean; Broad, Bean; Butter, Bean; Cacao, Bean; Dry, Bean; Fava, Bean; French, Bean; Garden, Bean; Garbanzo, Bean; Green, Bean; Kidney, Bean; Lima, Bean; Mung, Bean; Navy, Bean; Pea, Bean; Pigeon, Bean; Pinto, Bean; Red, Bean; String, Bean; Sugar, Bean; Snap, and other fresh, dry, vine, fuel and forage legume vegetables grown for seed.

Disease	Product Rate (fl oz per 100 lb of seed)
Fusarium spp.	
Pythium spp.	0.1 – 3
Rhizoctonia spp.	

RICE	
Disease	Product Rate (fl oz per 100 lb of seed)
Fusarium spp.	
Pythium spp.	0.1 – 3
Rhizoctonia spp.	

### **SEED TAG LABELING**

The Federal Seed Act requires that the container of seed treated with BAY2000 must be labeled with the following statements:

- This seed has been treated with:
  - o BAY2000, which contains 1.38% Bacillus pumilus strain QST2808.
- Do not use treated seed for food, feed, or oil production. User is responsible for ensuring that the seed bag
  meets all the requirements under the Federal Seed Act.

In addition, the US Environmental Protection Agency requires the following statements on the container of seed treated with **BAY2000**:

- · 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 buried away from water sources in accordance with local requirements.]
- [Do not contaminate water bodies when disposing of planting equipment wash waters.]
- Treated at manufacturer's recommended rate
- Treated seed must be adequately covered with soil at planting.
- 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 recommendations. Surplus seed or empty seed containers should be stored or disposed according to local federal regulations.]

For PRODUCT USE Information Call 1-866-99BAYER (1-866-992-2937)
For MEDICAL, TRANSPORTATION or OTHER Emergencies ONLY Call 24 Hours A Day 1-800-334-7577

### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in a dry area inaccessible to children. Store in original containers only. Keep container closed when not in use.

**PESTICIDE DISPOSAL:** To avoid waste, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal 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 Non-Refillable Plastic Containers

Rigid Non-refillable containers that are too large to shake (i.e., with capacities greater than 5 gallons) Non-refillable container. Do not reuse or refill this container. After emptying product from container, either return container to Bayer CropScience per instructions from Bayer CropScience Customer Service Center (1-800-527-4781), or rinse and either recycle or dispose of the container as follows:

Bottom Discharge 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 incineration.

### Dilutable Seed Treatment Products in Non-Refillable Metal Containers

Nonrefillable container. Do not reuse or refill this container. After emptying product from container, either return container to Bayer CropScience per instructions from Bayer CropScience Customer Service Center (1-800-527-4781), or rinse and either recycle or dispose of the container as follows:

### Liquid dilutables in containers small enough to shake (5 gallons or less)

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.

### Solid dilutables in containers small enough to shake (5 gallons or 50 pounds or less)

Triple Rinse as follows: Empty the remaining contents into application equipmentor 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.

### Any dilutable pesticides in containers too large to shake (larger than 5 gallons or 50 pounds)

Triple Rinse as follows: Empty 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. Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.

### Non-Dilutable Seed-Treatment Products in Non-Refillable Containers:

#### Seed-Treatment Products in Non-Refillable Fiber Drums with Liners

Non-refillable container. Do not reuse or refill this container. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment, then offer for recycling if available or dispose of in a sanitary landfill or by incineration. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner.

### Seed-Treatment Products in Non-rigid, Non-Refillable Containers

Nonrefillable container. Do not reuse or refill this container. Completely empty container into application equipment. Then offer for recycling if available or dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

#### **Seed Treatment Products in Refillable Containers**

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. After emptying product from container, either return container to Bayer CropScience per instructions from Bayer CropScience Customer Service Center (1-800- 527-4781) or rinse and either recycle or dispose of the container as follows:

Bottom Discharge 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. Cleaning before refilling is the responsibility of the refiller. 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.

Cleaning before refilling is the responsibility of the refiller. To triple rinse the containers 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 incineration. End users are authorized to remove tamper evident cables as required to remove the product from the container unless the container is equipped with one way valves and refilling or returning is planned. If this is the case, end users are not authorized to remove tamper evident cables, one way valves or clean container.

[Batch codes are sticker applied to the front panel of every label on every product container]

**NET CONTENTS:** 

PRODUCED FOR



Bayer CropScience LP P.O. Box 12014, 2 T.W. Alexander Drive Research Triangle Park, North Carolina 27709 1-866-99BAYER (1-866-992-2937)

# BAY2000<sup>™</sup>

### **Section B: Non-Commercial Seed Treatment Uses**

# **BAY2000**<sup>™</sup>

[USE IN APPLICATION MIXES WITH OTHER COMMERCIAL SEED TREATMENT PRODUCTS]

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Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product at once for a refund of the purchase price.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties, and Limitations of Liability. These terms may only be modified by a written document signed by a duly authorized representative of Bayer CropScience LP.

Treatment of highly mechanically damaged seed, or seed of known low vigor and 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 Bayer CropScience LP, no claims are made to guarantee germination of carry-over seed.

**CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Bayer CropScience LP. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience LP is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCIENCE LP'S ELECTION, THE REPLACEMENT OF PRODUCT.

### DIRECTIONS FOR USE

### STOP - READ THE ENTIRE LABEL BEFORE 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. [For use only as described on the labeling. Not for isolation or deformulation. Do not culture.]

### NON-COMMERCIAL SEED TREATMENT USE DIRECTIONS

For Seed Treatment Use on Agricultural Establishments: Do not apply this product with a hopper box, planter box, slurry box, or any other at-plant methods. Uniform application to seed is necessary to ensure seed safety and best disease control. Only use seed that is sound and well cured prior to treatment. Consult your area agronomist regarding planting depth recommendations for the particular variety to be planted.

### 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 4 hours.

Exception: If the seed is treated with the product and the seed is soil injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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
- waterproof gloves
- shoes plus socks

### **BASIC USE INFORMATION**

BAY2000 contains bacteria that, when applied to seed, will germinate in the soil to colonize the developing root system and provide suppression of disease-causing organisms such as *Fusarium*, *Pythium* and *Rhizoctonia* that can attack plant roots. As a result of this biological protection, a vigorous root system is established by the plant, which often results in improved plant stand, plant health, and yield. For improved performance use BAY2000 in a program with other registered fungicides for seed treatment.

### **USE RATE DETERMINATION**

Carefully read and follow all label directions, use rates and restrictions. Prepare only the amount of product solution required to treat the amount of seed required.

### **APPLICATION INSTRUCTIONS**

[For Seed Treatment Use on Agricultural Establishments: Do not apply this product with a hopper box, planter box, slurry box, or any other at-plant methods. Read the entire label and observe all label directions and precautions before use. Do not use this product except as directed on this label or on other Bayer CropScience supplemental labeling for this product.]

### MIXING INSTRUCTIONS

**MIXING**: BAY2000 may be mixed with other registered pesticides. This product cannot be mixed with any product with a prohibition against such mixing. When mixing BAY2000 with other registered pesticides, always read and follow all use directions, restrictions, and precautions of both BAY2000 and the mix partner(s). Use of the resulting mix must be in accordance with the more restrictive label limitations and precautions. Do not exceed label dosage rates

**COMPATIBILITY:** Do not combine BAY2000 in the slurry with any product in which there has been no previous experience or use of the combination to show it is physically compatible, effective and non-injurious under your use conditions. BAY2000 is compatible with many commonly used pesticides but has not been fully evaluated with all of these. It is essential that before using BAY2000 in any tank mixture the compatibility of the mixture be established. Add BAY2000 at the labeled rate to a clean quart jar containing approximately one-half the amount of water intended for a final slurry application rate. Next, follow with all other tank mix components that will be used in the total slurry application. Add last the remaining balance of water. The total amount of volume is determined by the seed size and how much is necessary to ensure complete and uniform coverage and distribution on the seed, as well as the type of seed treating application equipment that will be used.

DO NOT USE MIXTURES THAT CURDLE, PRECIPITATE, OR GEL. USE TANK MIXTURES IMMEDIATELY AFTER MIXING WITH ADEQUATE AGITATION.

### For Use as a Seed Treatment:

When using with other chemical insecticide or fungicide seed treatments: first add the chemical insecticides or fungicides to the slurry mix with approximately ½ of the required water. Slowly add the BAY2000 to the slurry until a suspension is obtained. Add the remainder of the water and maintain adequate agitation. **Do not store mixed slurries for more than 24 hours.** 

When using only BAY2000 seed treatment: Add ½ the required water to the slurry mix. Slowly add the BAY2000 to the slurry until a suspension is obtained. Add the remainder of the water and maintain adequate agitation. **Do not store mixed slurries for more than 24 hours**.

Do not store excess treated seeds beyond planting time.

Note: This product does not contain dye and is not covered by an appropriate tolerance, tolerance exemption, or other clearance under the Federal Food, Drug and Cosmetic Act. To comply with 40 CFR 153.155, therefore, all seed treated with this product must be colored with an EPA-approved dye or colorant of a suitable color to prevent accidental use as food for man or feed for animals.

### **SPECIFIC CROP DIRECTIONS**

## CROP USE DIRECTIONS Application Rates of BAY2000 for Seed Treatment

For suppression of seedling and root diseases on the following select agricultural crop seeds:

CANOLA, RAPESEED	
Disease	Product Rate (fl oz per 100 lb of seed)
Fusarium spp.	
Pythium spp.	0.3 – 5
Rhizoctonia spp.	

CORN Corn, Sweet; Corn, Feed; Corn, Field; Corn, Fuel; Corn, Pop	
Disease	Product Rate (fl oz per 100 lb of seed)
Fusarium spp.	
Pythium spp.	0.2 – 5
Rhizoctonia spp.	

COTTON Cotton, Short Staple; Cotton, Long Staple; Cotton, Upland; Cotton, Pima	
Disease	Product Rate (fl oz per 100 lb of seed)
Fusarium spp. Pythium spp. Rhizoctonia spp.	0.2 – 3

CEREAL GRAINS Amaranth, Grain; Sorghum, Grain; Barley, Grain; Oat, Grain; Wheat, Grain; Lupine Grain		
Disease	Product Rate (fl oz per 100 lb of seed)	
Fusarium spp.		
Pythium spp.	0.1 – 3	
Rhizoctonia spp.		

### **LEGUME VEGETABLES**

Beans Sprouts, Bean; Adzuki, Bean; Black, Blue Lake, Bean; Broad, Bean; Butter, Bean; Cacao, Bean; Dry, Bean; Fava, Bean; French, Bean; Garden, Bean; Garbanzo, Bean; Green, Bean; Kidney, Bean; Lima, Bean; Mung, Bean; Navy, Bean; Pea, Bean; Pigeon, Bean; Pinto, Bean; Red, Bean; String, Bean; Sugar, Bean; Snap, and other fresh, dry, vine, fuel and forage legume vegetables grown for seed.

Disease	Product Rate (fl oz per 100 lb of seed)
Fusarium spp.	
Pythium spp.	0.1 – 3
Rhizoctonia spp.	

RICE	
Disease	Product Rate (fl oz per 100 lb of seed)
Fusarium spp.	
Pythium spp.	0.1 – 3
Rhizoctonia spp.	

### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in a dry area inaccessible to children. Store in original containers only. Keep container closed when not in use.

**PESTICIDE DISPOSAL:** To avoid waste, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal 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 Non-Refillable Plastic Containers

Rigid Non-refillable containers that are too large to shake (i.e., with capacities greater than 5 gallons) Non-refillable container. Do not reuse or refill this container. After emptying product from container, either return container to Bayer CropScience per instructions from Bayer CropScience Customer Service Center (1-800-527-4781), or rinse and either recycle or dispose of the container as follows:

Bottom Discharge 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 incineration.

#### Dilutable Seed Treatment Products in Non-Refillable Metal Containers

Nonrefillable container. Do not reuse or refill this container. After emptying product from container, either return container to Bayer CropScience per instructions from Bayer CropScience Customer Service Center (1-800-527-4781), or rinse and either recycle or dispose of the container as follows:

### Liquid dilutables in containers small enough to shake (5 gallons or less)

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.

### Solid dilutables in containers small enough to shake (5 gallons or 50 pounds or less)

Triple Rinse as follows: Empty the remaining contents into application equipmentor 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.

### Any dilutable pesticides in containers too large to shake (larger than 5 gallons or 50 pounds)

Triple Rinse as follows: Empty 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. Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.

### Non-Dilutable Seed-Treatment Products in Non-Refillable Containers:

### Seed-Treatment Products in Non-Refillable Fiber Drums with Liners

Non-refillable container. Do not reuse or refill this container. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment, then offer for recycling if available or dispose of in a sanitary landfill or by incineration. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner.

### Seed-Treatment Products in Non-rigid, Non-Refillable Containers

Nonrefillable container. Do not reuse or refill this container. Completely empty container into application equipment. Then offer for recycling if available or dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

#### Seed Treatment Products in Refillable Containers

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. After emptying product from container, either return container to Bayer CropScience per instructions from Bayer CropScience Customer Service Center (1-800- 527-4781) or rinse and either recycle or dispose of the container as follows:

Bottom Discharge 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. Cleaning before refilling is the responsibility of the refiller. 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.

Cleaning before refilling is the responsibility of the refiller. To triple rinse the containers 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 incineration. End users are authorized to remove tamper evident cables as required to remove the product from the container unless the container is equipped with one way valves and refilling or returning is planned. If this is the case, end users are not authorized to remove tamper evident cables, one way valves or clean container.

[Batch codes are sticker applied to the front panel of every label on every product container]

**NET CONTENTS:** 

PRODUCED FOR



Bayer CropScience LP P.O. Box 12014, 2 T.W. Alexander Drive Research Triangle Park, North Carolina 27709 1-866-99BAYER (1-866-992-2937)

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