



## OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

WASHINGTON, D.C. 20460

November 25, 2025

Clorinda Johnson  
Sr. Manager of Global Regulatory  
Indigo Ag, Inc.  
500 Rutherford Ave.  
Charlestown, MA 01880

Subject: Non-PRIA (Pesticide Registration Improvement Act) Labeling and Formulation  
Amendment – Addition of Alternate CSF #1 to the Registration, Change of Expiration  
Dates, Addition of Alternate Brand Name  
Product Name: Indigo 229 FP  
EPA Registration Number: 95213-3  
EPA Receipt Date: 6/20/2025  
Action Case Number: 00663924

Dear Clorinda Johnson:

The amended labeling and Confidential Statement of Formula (CSF) referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, are acceptable.

The alternate brand names PathoShield FP and biottrinsic PathoShield FP have been added to the registration, and our records have been updated accordingly. This approval does not affect any terms or conditions that were previously imposed on this registration. You continue to be subject to existing terms or conditions on your registration and any deadlines connected with them.

Please note that the record for this product currently contains the following acceptable CSFs:

- Basic CSF dated 01/13/2022
- Alternate CSF #1 dated 11/17/2025

Any CSFs other than those listed above are superseded/no longer valid.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one (1) copy of the final printed labeling before you release this 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 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 U.S. Environmental Protection Agency. 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 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 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 EPA's Office of Enforcement and Compliance Assurance.

Additionally, in a memorandum dated August 11, 2025 (see enclosure), EPA rated submitted storage stability and corrosion characteristics data (MRID No. 52620501) as acceptable. Thus, you have fulfilled term #2 of the January 13, 2022, Indigo 229FP Registration Notice.

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

If you have any questions, please contact Emilie Cooper via email at [cooper.emilie@epa.gov](mailto:cooper.emilie@epa.gov).

Sincerely,

*Joseph Mabon*

Digitally signed by  
JOSEPH MABON  
Date: 2025.11.25  
10:27:18 -05'00'

Joseph Mabon, Risk Manager  
Microbial Pesticides Branch  
Biopesticides and Pollution  
Prevention Division (7511M)  
Office of Pesticide Programs

Enclosure: Science Memorandum (Dated 8/11/2025)



## INDIGO® 229 FP

{Alternate Brand Names: PathoShield FP, biottrinsic PathoShield FP, biottrinsic X11 FP, biottrinsic X19 FP, and biottrinsic X29 FP}

**Microbial Seed Treatment for the management, control of, and suppression of listed diseases**

**ACTIVE INGREDIENT:**

<i>Kosakonia cowanii</i> strain SYM00028*	0.102%
OTHER INGREDIENTS:	99.898%
TOTAL:	100.000%

\*Contains a minimum of  $1 \times 10^7$  cfu/g of product

EPA Reg. No. 95213-3

EPA Est. No.

**KEEP OUT OF REACH OF CHILDREN**

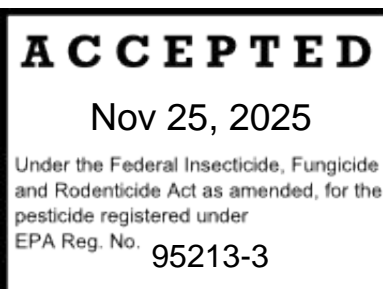
See additional precautionary statements and directions for use in booklet.

**Net Weight:** [added based on package size before printing]

**Lot#:** [Lot number printed on container]

**Not for sale or use after** [date stamped here will be 24 months after the date of manufacture]

Indigo Ag, Inc.  
500 Rutherford Avenue  
Charlestown, MA 02129  
Ph. (901) 250-5737



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## PRECAUTIONARY STATEMENTS

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### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Socks plus shoes
- Waterproof gloves

Mixer/loaders and applicators must 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.)

Follow the 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 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. Users should remove clothing / PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

### 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.

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## DIRECTIONS FOR USE

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**It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read entire label before using this product.**

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, 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 (REI). 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 product is 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 treated seed) is:

- Coveralls
- Socks plus shoes
- Waterproof gloves

## NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses that are NOT within the scope of the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Keep unprotected persons out of treatment area until seeds have dried or been packaged

## PRODUCT INFORMATION

Indigo® 229 FP is a microbial seed treatment for the management, control of, and suppression of plant diseases.

This product is a mixture of a live microbe and inert powder. To maintain the performance of the live microbe, the product must be applied as specified in the Application Instructions and stored as specified in the Storage and Disposal instructions.

## APPLICATION INSTRUCTIONS

### Seed Treatment Application

For suppression of listed diseases. See Crop Application Table.

### Seed Treatment Use

Indigo® 229 FP can be applied to seed following one of two methods:

- The product can be applied using a measuring cup as seed is being loaded into the central hopper of the planter/seeder or individual row unit. Make sure the product is evenly dispersed onto the seed as it fills the hopper or row unit. If applied at the individual row unit, a power drill with an auger bit can be used to evenly disperse the product onto the seed.
- The product can be applied using equipment designed to meter dry products onto seed as it is being transferred up a conveyor or auger either on the farm or at a seed treatment location. Be sure the product is applied evenly over the seed as it enters the conveyor or auger.

## Crop Application Table

[Volumetric ounces are used for ease of application]

Crops	Diseases Suppressed	Application Rate
<b>Brassica (Cole) Leafy Vegetables:</b> Broccoli, Broccoli raab (rapini), Brussels sprouts, Cabbage, Cauliflower, Cavalo broccolo, Chinese broccoli (gai lon), Chinese cabbage (bok choy and napa), Chinese mustard cabbage (gai choy), Collards, Kale, Kohlrabi, Mizuna, Mustard greens, Mustard spinach, Rape greens, and other brassica leafy vegetable crops. Includes cultivars, varieties and/or hybrids of these commodities	<i>Fusarium</i> (sp.); <i>Phytophthora</i> (sp.); <i>Pythium</i> (sp.); <i>Rhizoctonia</i> (sp.); <i>Verticillium</i> (sp.)	1.0 – 4.0 fluid ounce/cwt of seed
<b>Bulb Vegetables:</b> Chives, Daylily, Elegans hosta, Fritillaria (bulb and leaves) Garlic, Kurrat, Leek, Lily, Onion (bulb and green), Shallot (bulb and leaves)	<i>Alternaria</i> (sp.); <i>Botrytis</i> (sp.); <i>Fusarium</i> (sp.); <i>Peronospora</i> (sp.); <i>Phytophthora</i> (sp.); <i>Puccinia</i> (sp.); <i>Pythium</i> (sp.); <i>Rhizoctonia</i> (sp.)	1.0 – 4.0 fluid ounce/cwt of seed
<b>Cereal Grains (except corn):</b> Barley; Buckwheat; Millet, pearl; Millet, proso; Oats; Popcorn; Rice; Rye; Sorghum; Teosinte; Triticale; Wheat; Wild rice	<i>Achlya</i> (sp.); <i>Aspergillus</i> (sp.); <i>Bipolaris</i> (sp.); <i>Cochliobolus</i> (sp.); <i>Drechslera</i> (sp.); <i>Fusarium</i> (sp.); <i>Gaeumannomyces</i> (sp.); <i>Penicillium</i> (sp.); <i>Phytophthora</i> (sp.); <i>Puccinia</i> (sp.); <i>Pythium</i> (sp.); <i>Rhizoctonia</i> (sp.); <i>Septoria</i> (sp.); <i>Tilletia</i> (sp.); <i>Urocystis</i> (sp.); <i>Ustilago</i> (sp.)	1.0 – 4.0 fluid ounce/cwt of seed

Crops	Diseases Suppressed	Application Rate
<b>Corn (fresh sweet corn and dried field corn)</b>	<i>Achlya</i> (sp.); <i>Cercospora</i> (sp.); <i>Cochliobolus</i> (sp.); <i>Colletotrichum</i> (sp.); <i>Fusarium</i> (sp.); <i>Gibberella</i> (sp.); <i>Macrophomina</i> (sp.); <i>Penicillium</i> (sp.); <i>Phyllachora</i> (sp.); <i>Phytophthora</i> (sp.); <i>Puccinia</i> (sp.); <i>Pythium</i> (sp.); <i>Rhizoctonia</i> (sp.); <i>Sphacelotheca</i> (sp.); <i>Stenocarpella</i> (sp.)	1.0 – 4.0 fluid ounce/ cwt of seed
<b>Cotton (including cottonseed, cultivars, varieties, and/or hybrids of these)</b>	<i>Achlya</i> (sp.); <i>Cochliobolus</i> (sp.); <i>Fusarium</i> (sp.); <i>Penicillium</i> (sp.); <i>Phytophthora</i> (sp.); <i>Pythium</i> (sp.); <i>Rhizoctonia</i> (sp.)	1.0 – 4.0 fluid ounce/ cwt of seed
<b>Legume Vegetables (except soybean):</b> Bean ( <i>Lupinus</i> spp.) (includes grain lupin, sweet lupin, white lupin, and white sweet lupin); bean ( <i>Phaseolus</i> spp.) (includes field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean); bean ( <i>Vigna</i> spp.) (includes adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea, Crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean, yardlong bean); broad bean (fava bean); chickpea (garbanzo bean); guar; jackbean; lablab bean (hyacinth bean); lentil; pea ( <i>Pisum</i> spp.) (includes dwarf pea, edible-podded pea, English pea, field pea, garden pea, green pea, snowpea, sugar snap pea); pigeon pea; sword bean	<i>Achlya</i> (sp.); <i>Cochliobolus</i> (sp.); <i>Fusarium</i> (sp.); <i>Penicillium</i> (sp.); <i>Phytophthora</i> (sp.); <i>Pythium</i> (sp.); <i>Rhizoctonia</i> (sp.)	1.0 – 4.0 fluid ounce/ cwt of seed
<b>Oil Seeds (except cottonseed):</b> Borage; calendula; castor oil plant; Chinese tallowtree; crambe; cuphea; echium; euphorbia; evening primrose; flax seed; gold of pleasure; hare's ear mustard; jojoba; lesquerella; lunaria; meadowfoam; milkweed; mustard seed; niger seed; oil radish; poppy seed; rapeseed; rose hip; safflower; sesame; stokes aster; sunflower; sweet rocket; tallowwood; tea oil plant; vernonia; cultivars, varieties, and/or hybrids of these	<i>Achlya</i> (sp.); <i>Cochliobolus</i> (sp.); <i>Fusarium</i> (sp.); <i>Penicillium</i> (sp.); <i>Pythium</i> (sp.); <i>Phytophthora</i> (sp.); <i>Rhizoctonia</i> (sp.)	1.0 – 4.0 fluid ounce/ cwt of seed

Crops	Diseases Suppressed	Application Rate
<b>Root and Tuber Vegetables:</b> Artichoke; Carrot; Potato; Radish; Sugar beet; Sweet potato; Cassava; Ginger; True yam; Dasheen (taro)	<i>Alternaria</i> (sp.); <i>Botrytis</i> (sp.); <i>Cercospora</i> (sp.); <i>Fusarium</i> (sp.); <i>Helminthosporium</i> (sp.); <i>Peronospora</i> (sp.); <i>Phytophthora</i> (sp.); <i>Pythium</i> (sp.); <i>Rhizoctonia</i> (sp.); <i>Sclerotinia</i> (sp.); <i>Sclerotium</i> (sp.)	1.0 – 4.0 fluid ounce/ cwt of seed
<b>Soybean</b>	<i>Achlya</i> (sp.); <i>Aspergillus</i> (sp.); <i>Cercospora</i> (sp.); <i>Cochliobolus</i> (sp.); <i>Colletotrichum</i> (sp.); <i>Diaporthe</i> (sp.); <i>Fusarium</i> (sp.); <i>Macrophomina</i> (sp.); <i>Penicillium</i> (sp.); <i>Phakopsora</i> (sp.); <i>Phomopsis</i> (sp.); <i>Phytophthora</i> (sp.); <i>Pythium</i> (sp.); <i>Rhizoctonia</i> (sp.); <i>Sclerotinia</i> (sp.)	1.0 – 4.0 fluid ounce/ cwt of seed

### ADDITIONAL INFORMATION

Please consult with your Indigo® Certified Agronomist if there are questions on compatibility of specific chemical seed treatments and corresponding planting windows. Contact Indigo® Supply Chain at 901-250-5737. Indigo® products may not yet be registered in all states. Check with your Indigo® representative for the registration status in your state.

Information about this lot of microbial seed treatment may be obtained by writing to Indigo Ag, Inc. 500 Rutherford Avenue, Charlestown, MA 02129 and giving the lot number that is found on the front panel of this label.

## STORAGE AND DISPOSAL

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

### **Pesticide Storage**

Store in a cool, dry place away from direct sunlight, heat sources, and below 75°F, until used. Do not allow product to freeze. Do not open the package until it is ready to use. Do not store this product near food or feed.

### **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 disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

### **Container Handling**

Nonrefillable Container. Do not reuse or refill this container. Completely empty bag 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 empty bag in sanitary landfill or by incineration. Do not burn, unless allowed by state and local ordinances. If burned, stay out of smoke. If outer box is contaminated, dispose of it in the same manner as required for the bag.

## **Limitations of Use**

Any buyer or user (each a "Customer") agrees to handle and use this product in conformity with all limitations of use, including the prohibition of analyzing for content, reverse engineering, extracting, purifying, or otherwise obtaining any material, for any use whatsoever, from the product in any form.

This prohibition includes the growing or culturing of any material for further use of such material for any use whatsoever including research. Customer agrees that this product will only be used as instructed on the product label and only for the crop and purpose stated therein.

## **Conditions of Sale and Limitation of Warranty and Liability Notice**

The directions for application and use of this product must be followed carefully and in accordance with applicable law. It is impossible to eliminate all risks inherently associated with the use, storage and disposal of this product. Crop loss, ineffectiveness or other unintended consequences may result because of such factors including improper application or use, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Indigo Ag, Inc. All such risks shall be assumed by the Customer, and the Customer agrees to hold Indigo Ag, Inc. harmless for any claims relating to such factors. Indigo Ag, Inc. warrants that this product conforms to the description on the corresponding label within reasonable tolerances. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, INDIGO AG, INC. MAKES NO OTHER WARRANTIES AND DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR AN INTENDED PURPOSE.

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