

Indigo® Biologicals™ Inoculants are available as a variety of seed treatment products including water based liquids (WD), wettable powders that require dilution in water (WP), and dry flowable powders (FP). Each of these products can be successfully applied on farm following the guidelines below to achieve uniform distribution on seed and maximum benefit in the field.

## General

- » Always read the product label and adhere to the Application Instructions and Application Rate for Seed Treatment listed.
- » Stir or shake the product well before use.
- » Always wear the appropriate personal protective equipment as described on the product label and SDS.
- » Consult with your retailer or Indigo Certified Agronomist if there are questions on compatibility of specific chemical seed treatments and corresponding planting windows.

## Flowable Powder (FP) Products

Indigo flowable powder products are intended to be applied as a dry powder to seed. The powder will adhere to the seed through static interactions and do not require the use of a sticker or adhesion promoter to make the powder adhere. These products should not be mixed with water or any other liquid.

### Manual Seed Treatment Using a Scoop

- » The flowable powder can be manually applied to seed using the supplied scoop or a similar measuring cup. Be sure to accurately measure the correct amount of product for the quantity of seed being treated based on the label application rate for best results.
- » The flowable powder can be applied directly to seed in a bulk bag or pro-box. Measure the required amount of product with a scoop and apply evenly over the top of the seed. The treated seed must then be transferred at least once into another container or up an auger/ conveyor before adding to the planter or seeder to ensure uniform distribution of the product on the seed.
- » The flowable powder can also be applied to seed as it is being transferred by an auger or conveyor. The product can be applied to seed as it enters the auger/ conveyor or as it exits the auger/ conveyor and is collected in the planter or seeder. Measure out the required amount of product with a scoop or suitable measuring container for the quantity of seed that will be transferred. Apply the product evenly as the seed enters or exits the auger/ conveyor by simply broadcasting the product on the seed as it passes by. Be sure to add the product at a rate such that all seed receives treatment during the transfer process. It can be helpful to know the seed flow rate up the auger/ conveyor to know the approximate rate to apply the product.

### Seed Treatment Using an Automated Powder Feeder

- » The flowable powder can be applied to seed using an automated powder feeder (such as a CT Dry Applicator) during transfer up an auger or conveyor. The automated powder feeder should be positioned so that the product is applied at the entrance of the auger/ conveyor to insure good mixing up the length of the transfer equipment. Measure the seed flow rate up the auger/ conveyor in pounds per minute and set the automated powder feeder to supply product at the flow rate determined by the equation below.

$$\text{Seed flow rate} \left( \frac{\text{lbs}}{\text{min}} \right) \times \text{Product application rate} \left( \frac{\text{floz}}{\text{CWT}} \right) \times 0.01 = \text{Product flow rate} \left( \frac{\text{floz}}{\text{min}} \right)$$

- » Be sure to start the product flow before starting seed flow to insure uniform coverage over all of the seed. A remote start/ stop feature can be helpful in operating the automated powder feeder and transfer equipment.

## Water Dispersion (WD) and Wettable Powder (WP) Products

- » Indigo water dispersion and wettable powder products can be applied using standard liquid seed treatment equipment. Unless allowed on the label, these products cannot be mixed with other seed treatment products.
- » Indigo wettable powder products must be diluted into water, or other microbial inoculants if applicable, at the ratio listed on the label before seed treatment. The dilution can be done in a smaller volume of water and shaken by hand before adding to the mix tank with the full volume of water. The dilution can also be done with the full volume of water directly in the mix tank. Be sure the slurry in the mix tank is well stirred using an overhead mixer or by re-circulation to ensure the powder is uniformly dispersed.
- » Indigo water dispersion products can be diluted in water, or other microbial inoculant if applicable, if desired to apply at a higher application rate. Be sure the slurry in the mix tank is well stirred using an overhead mixer or by re-circulation to ensure uniformity.
- » The water dispersion and wettable powder products are recommended to be applied as seed is being transferred with an auger or conveyor. The liquid can be sprayed onto the seed as it exits the auger or conveyor using equipment such as the Graham P1AS treater.

## How Do I Calibrate My Equipment?

Calibration is critical to ensure the correct amount of product is applied to the seed.

- » Run grain through the auger, and once the grain flow is consistent collect grain for a known time (T, seconds).
- » Weigh the grain (W, Lbs).
- » Grain flow rate:  $W \text{ (lbs)} / T \text{ (Seconds)} \times 0.6 \text{ (conversion factor)} = \text{CWT/min.}$

Now it is time to calibrate your spray unit with your required output target for your grain flow rate. It is our recommendation that you apply at least 7 floz. per CTW to ensure good seed coverage for wheat. For application of Indigo Cereals WP, combine the 200g package of Indigo Cereals WP, 1 GA package of Indigo Extender, and 6 GA of water. This solution should be mixed thoroughly prior to adding to your spray unit.

- » Output target rate: Grain flow rate (CWT/min) X 7 floz. (Application rate).
- » Run the spray unit for 1 minute while catching the solution in a measuring pitcher.
- » Adjust the PSI on the pump until the amount of solution caught in 1 minute equals the output target rate.



Indigo is dedicated to helping you succeed, we've negotiated a special discount price. To take advantage of this offer please call Graham at 1-866-556-2846 and mention Indigo's pricing discount.