

# BioniQ wettable powder

## nutrient-solubilizing inoculant for

canola, all wheat, oats,  
mustard, barley  
and rye

Extended Label

**Microbial seed inoculant for improved nutrient availability**

### **MINIMUM GUARANTEE ANALYSIS**

Active Powder A:

ACTIVE:  $7.2 \times 10^8$  cfu *Penicillium bilaiae* per gram

INERT: wettable powder

Active Powder B:

ACTIVE:  $7.3 \times 10^8$  viable cfu/g *Bacillus amyloliquefaciens*

$2.2 \times 10^7$  cfu/g *Trichoderma virens*

INERT: wettable powder

**NON-PLANT FOOD INGREDIENT**

**Not a fertilizer substitute**

### **How it Works**

The active ingredients in BioniQ wettable powder are the bacteria *Bacillus amyloliquefaciens*, and the soil fungi *Penicillium bilaiae* and *Trichoderma virens*. *Penicillium bilaiae* makes less available residual soil phosphate immediately available for crop use. *Bacillus amyloliquefaciens* and *Trichoderma virens* can increase the availability and uptake of certain important plant nutrients. Increased nutrient availability may lead to an increase in yield response. BioniQ is not a fungicide and it will not replace your standard fungicide seed treatment.

### **How to Apply**

Open package only when ready to use. Use before expiration date. Apply this product only as specified on this label. Reference the specified application rate to determine the proper amount needed for seed.

#### **On-seed treatment:**

Inoculate seed on-farm by adding and thoroughly mixing the entire contents of both Active Powder A (333 g) and Active Powder B (450 g) in the appropriate amount of water (refer to Table 1) prior to or during seeding.

BioniQ can be applied utilizing commercial on seed application equipment. Applicators used previously for pesticides should be triple rinsed before being used for BioniQ application.

### **When applying BioniQ wettable powder with other seed treatment products:**

Novozymes BioAg Limited strongly recommends a SIMULTANEOUS APPLICATION USING SEPARATE TANKS/NOZZLES (also called wet sequential application) – where the other seed treatment components and BioniQ products are mixed in separate premix tanks and sprayed wet onto the seed at the same time (simultaneous application).

**Seed treatment compatibility:** Although BioniQ is compatible with many fungicide (FST) and/or insecticide (IST) seed treatment products, on-seed and in-tank survival of BioniQ may be significantly reduced by using a common tank mix application method and must be applied within 2 hours. Do not apply with seed treatment formulations containing high levels of Zinc or Copper. BioniQ has not been tested with all possible seed treatment combinations.

For a list of compatible seed treatments, contact Novozymes BioAg Limited at 1-888-744-5662.

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**Table 1: On-seed application rates and bare seed planting windows**

BioniQ 783 g co-pack			
Crop	Seed inoculated by one 783 g co-pack	Approx. water volume	Planting window (bare seed)
Barley	5,445 kg (12,000 lb, 250 bu)	34 litres	60 days
Canola/ Mustard	227 kg (500 lb, 10 bu)	5 litres	60 days
Oats	3,857 kg (8,500 lb, 250 bu)	24 litres	60 days
Rye	6,352 kg (14,000 lb, 250 bu)	39 litres	60 days
Wheat	6,818 kg (15,000 lb, 250 bu)	42 litres	60 days

### Applicators and Other Handlers

The active ingredients in BioniQ are *Penicillium bilaiae*, *Bacillus amyloliquefaciens* and *Trichoderma virens* spores. Eye or skin contact, inhalation, or ingestion should be avoided. Do not eat, drink or smoke when using this product. Wear standard protective clothing and equipment including gloves and safety glasses. Ensure adequate ventilation. Where exposure through inhalation may occur, use respiratory protective equipment. This product contains microorganisms that may have the potential to provoke sensitizing reactions; use appropriate personal protective equipment (PPE) to reduce exposure. Sensitized individuals should wear a NIOSH-approved respirator. In case of contact with skin or eyes, immediately flush exposed areas with plenty of water. Get medical attention if irritation occurs. Wash thoroughly after handling. If inhaled: Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell.

### Storage and Disposal

BioniQ wettable powder contains live spores of the naturally occurring fungi *Penicillium bilaiae* and *Trichoderma virens* and the naturally occurring bacteria *Bacillus amyloliquefaciens*, which may be damaged when exposed to high temperatures or contact with water for more than 4 hours. The live organisms contained in BioniQ wettable powder require specific storage conditions to ensure viability and product performance.

To maintain product viability:

- Store unopened containers of BioniQ wettable powder in a dry cool place (less than 20 °C or 68 °F) away from sunlight and heat sources. Store locked up.
- Minimize temperature fluctuations.
- Avoid freeze/thaw cycles.
- Use before the expiration date. The expiration date is valid for unopened containers stored according to conditions listed above.
- Keep out of reach of children.

Unused BioniQ and seed to which BioniQ has been applied should be disposed of in accordance with applicable Federal, State/provincial, and local requirements.

### Limited Warranty

Novozymes BioAg Limited warrants that the product conforms to the specifications set out on this label. Notwithstanding the foregoing, in no event shall Novozymes BioAg Limited be liable to users or any other persons for any loss or damage caused by use or misuse of BioniQ. Novozymes BioAg Limited expressly disclaims any and all other warranties and representations, whether express or implied, whether arising by statute or otherwise in law or from a course of dealing or usage of trade, including, but not limited to, any warranty of merchantability or fitness for a particular purpose.