

JumpStart[®] wettable powder phosphate-solubilizing inoculant for

soybean

Extended Label

MINIMUM GUARANTEE ANALYSIS

ACTIVE: 7.2×10^8 cfu *Penicillium bilaiae* per gram

INERT: wettable powder

NON-PLANT FOOD INGREDIENT

Not a fertilizer substitute

How it Works

The active ingredient in JumpStart[®], the naturally occurring soil fungus *Penicillium bilaiae*, grows on plant roots and makes less available residual soil phosphate immediately available for crop use.

How to Apply

Easy to use applicators are available for inoculating seed with JumpStart. JumpStart can also be applied during seeding using on-the-go treaters (refer to on-the-go treaters manual for application instructions).

- Apply the JumpStart suspension to seed using a flow regulated applicator when transferring seed from the bin to the truck, or from the truck to the tank or seed cart.
- Fill the applicator tank with the required volume of cool, clean water (refer to Table 1).
- While mixing continuously, slowly add the contents of one 57 g (2.0 oz) JumpStart container to the water in the applicator tank.
- Mix well and agitate continuously to avoid settling.

JumpStart can be used with all nitrogen-fixing rhizobial inoculants. To mix Jumpstart with a liquid inoculant, first suspend the entire contents of the JumpStart wettable powder bottle in a small amount of the liquid inoculant for easier mixing. Pour the mixture into the remaining liquid Rhizobia inoculant and mix to suspend. No additional water is necessary.

JumpStart applied to bare soybean seed should be planted according to the planting windows listed on Table 1.

Table 1: Application rate for JumpStart soybean

| 57 g (2.0 oz) container | | | |
|-------------------------|--|-------------------------------|------------------------------------|
| Crop | Seed inoculated by one 57 g (2.0 oz) container | Approx. water volume | Planting window (bare seed) |
| Soybean | 1,135 kg (2,500 lb, 42 bu) | 3.5 litres (3.9 US quarts) | 120 days at 4°C 30 days at 15°C |

Seed Treatment Recommendations

- Once JumpStart is mixed in water, apply to seed within 6 hours.
- JumpStart can be used with most seed-applied treatments but the planting window will be reduced.
- For up-to-date pesticide compatibility and bare seed stability information, please contact Novozymes BioAg Limited at 1-888-744-5662.

Where to use for Maximum Benefit

For soils low to medium in available phosphate:

Use JumpStart with the lower recommended P fertilizer rate from soil test results. If you do not soil test, use with your normal P fertilizer rate.

For soils high to very high in available phosphate:

Replace the starter in-row P fertilizer application [16.8-22.4 kg P₂O₅/ha (15-20 lb P₂O₅/acre)] with JumpStart.

Benefits of using JumpStart may be limited on:

- Extremely sandy soils (greater than 85% sand);
- Extremely high organic matter soils (greater than 14% organic matter);
- Fields that have been heavily manured over the last several years.

JumpStart[®] wettable powder phosphate-solubilizing inoculant for

soybean

Applicators and Other Handlers

The active ingredient in JumpStart phosphate-solubilizing inoculant is *Penicillium bilaiae* spores. Eye or skin contact, inhalation, or ingestion should be avoided. 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.

Storage and Disposal

The active ingredient in JumpStart is a living organism and requires specific storage conditions to ensure viability and product performance. To maintain product viability:

- Store JumpStart containers and seed to which JumpStart has been applied in a cool, unheated facility <20°C (68°F) away from sunlight and direct heat sources.
- Minimize temperature fluctuations.
- Avoid freeze/thaw cycles.
- Use entire contents of container once opened.
- Use before the expiry date. The expiry date is valid only for unopened containers stored under the conditions. Do not mix with unapproved products.
- For a list of compatible seed treatments, contact Novozymes BioAg Limited at 1-888-744-5662. Unused JumpStart and unplanted seed to which JumpStart has been applied should be disposed of in accordance with applicable Federal, state/provincial, and local requirements.

Limited Warranty

The seller warrants that this product contains a minimum number of *Penicillium bilaiae* colony forming units as specified on this label. The seller makes no other warranty expressed or implied as to product viability or performance since product storage, use and growing conditions are beyond the seller's control. Seller's guarantee is limited to the terms set out on the label and subject thereto. Buyer assumes the risk to persons or property arising from the use or handling of this product and accepts the product on that condition.