

***Bacillus subtilis* MBI 600 (129082) Fact Sheet**

Summary

Bacillus subtilis MBI 600 is a bacterium which is used in fungicide products as a treatment for seeds of cotton, beans, barley, wheat, corn, peas, peanuts and soybeans. Products containing this active ingredient are used for the suppression of root diseases and seedling diseases caused by certain fungi. Use of the fungicide is not expected to harm humans or the environment.

I. Description of the Active Ingredient

Bacillus subtilis MBI 600 is a spore-forming bacterium that colonizes the developing root system of young plants. The bacterium thus competes with and thereby suppresses disease organisms such as *Fusarium*, *Rhizoctonia*, *Alternaria*, and *Aspergillus* that attack root systems. As a result of this biological protection, the plant may establish a more vigorous root system. Because *Bacillus subtilis* MBI 600 forms spores, pesticide products containing this active ingredient are stable. Therefore, even if treated seeds are stored, the bacteria stay alive, and then grow and multiply after the seeds are planted.

II. Use Sites, Target Pests, And Application Methods

- **Use Sites:** Crop seeds such as beans, corn, peas, soybeans, barley, wheat, peanuts and cotton.
- **Target pests:** Wilts, crown rot, root rot and other seedborne diseases caused by the fungi *Fusarium*, *Aspergillus*, *Pythium*, and *Rhizoctonia*.
- **Application Methods:** The product with this active ingredient is for use as a seed treatment in a slurry mix that consists of the product, the seeds, insecticides and/or other fungicides, and water. The slurry mix is continuously agitated and is used within 72 hours.

III. Assessing Risks to Human Health

Based on review of the toxicology and other information submitted for *Bacillus subtilis* MBI 600, EPA finds no evidence of risks to human health. Because the bacteria colonize plant roots, exposure to humans would be minimal once the seeds are planted.

No adverse effects have been reported.

IV. Assessing Risks to the Environment

EPA finds that *Bacillus subtilis* MBI 600 is not harmful to non-target organisms or to the environment. Tests were conducted to help ensure that there were no risks to plants, insects or birds. Aquatic exposure is not expected. Tests have shown that this bacterium does not harm seeds or cause them to decay.

V. Regulatory Information

Bacillus subtilis MBI 600 was registered (licensed for sale) as a pesticide active ingredient on May 26, 1994. As of October 1999, there was one fungicide product approved by EPA with *Bacillus subtilis* MBI 600 as the active ingredient.

VI. Producer Information

Microbio Ltd.

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VII. Additional Contact Information

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