

***Bacillus subtilis* var. *amyloliquefaciens* strain FZB24 (006480) Fact Sheet**

Summary

Bacillus subtilis var. *amyloliquefaciens* strain FZB24 is a naturally occurring bacterium that can be used to control various fungal diseases in non-food crops, and to enhance plant growth. It is approved for use only in greenhouses and other indoor sites. Use of this bacterium in pesticide products is not expected to harm humans or the environment.

I. Description of the Active Ingredient

Bacillus subtilis var. *amyloliquefaciens* strain FZB24 is found naturally in soil and leaf litter, and can be easily grown in large quantities. It seems to work as a growth enhancer and disease suppressor through an enzyme that it produces.

II. Use Sites, Target Pests, and Application Methods

- **Use Sites:** *Bacillus subtilis* var. *amyloliquefaciens* strain FZB24 is approved for use only in greenhouses and other indoor sites. It can be used at these sites on shade and forest tree seedlings, ornamentals, and shrubs. Its use is not permitted on food crops.
- **Target Pests:** Specific soil fungi, such as *Rhizoctonia* and *Fusarium*, which cause rot and wilt diseases in plants
- **Application Methods:** *Bacillus subtilis* var. *amyloliquefaciens* strain FZB24 is sold as granules, which are suspended in water just before application. There are two ways the suspension can be applied:
 1. **Drench** - the applicator saturates the soil containing the plants to be treated, preferably soon after planting or transplanting.
 2. **Dip** - the applicator applies the suspension to roots or cuttings before planting.

III. Assessing Risks to Human Health

Whether or not a substance poses a risk to humans or other organisms depends on two factors: how toxic the substance is, and how much of it an organism is exposed to. Therefore, the EPA considers both toxicity and exposure data in determining whether to approve a pesticide for use

No harmful health effects to humans are expected from use of *Bacillus subtilis* var. *amyloliquefaciens* strain FZB24 in pesticide products. Appropriate animal tests provided no indication that this strain of *B. subtilis* is toxic or infectious to humans. Given the limited uses allowed for products containing this naturally occurring bacterium, additional exposure of the public is likely to be minimal or non-existent. As a precautionary measure, workers are required to wear specified protective equipment.

IV. Assessing Risks to the Environment

Bacillus subtilis var. *amyloliquefaciens* strain FZB24 occurs in many kinds of soil. Because its pesticidal use sites are limited to greenhouses and other indoor sites, environmental exposures are not expected to noticeably increase. Furthermore, various studies indicate that the bacterium does not pose a risk to non-target organisms or to the environment.

V. Regulatory Information

Bacillus subtilis var. *amyloliquefaciens* strain FZB24 was registered as a pesticide active ingredient in January, 2000. As of May 2000, there was one registered product

VI. Producer Information

MANUFACTURER : Taensa Inc.

UNITED STATES AGENT :

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VII. Additional Contact Information

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