

Burkholderia cepacia type Wisconsin strain M54 (006465) Burkholderia cepacia type Wisconsin strain J82 (006464) Fact Sheet

Active Ingredient Name: *Burkholderia cepacia* type Wisconsin strain M54 **OPP Chemical Code:** 6465

Active Ingredient Name: *Burkholderia cepacia* type Wisconsin strain J82 **OPP Chemical Code:** 6464

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Summary

These two strains of *Burkholderia cepacia* are used for controlling certain diseases of seedlings, and for controlling nematodes that attack the roots of crops in greenhouses and in the field. *B. cepacia* is a bacterium commonly found in water, and in soils near plant roots. *B. cepacia* type Wisconsin strains M54 and J82 both occur naturally in soil and water. Some strains of *B. cepacia* contribute to serious respiratory disease in patients with cystic fibrosis or chronic granulomatous disease. These two registered strains have not been found in clinical disease.

Application of pesticide products containing *B. cepacia* is limited to direct application to seeds, roots, or soil. To minimize inhalation exposure to susceptible populations, EPA does not allow the products be applied using foliar sprays or other means that might generate aerosols. As more information becomes available, EPA will modify the uses of these two active ingredients as needed. [More information is available at the Science Advisory Panel (SAP) web site at <http://www.epa.gov/scipoly/sap/1999/index.htm#072099>

I. Description of the Active Ingredient

Many kinds of *Burkholderia cepacia* are found naturally in soil and water. Strains M54 and J82 act as pesticides by preventing harmful fungi and nematodes from damaging roots, especially seedling roots. Scientists are performing studies to learn more about detection and persistence of *B. cepacia* strains in the environment. Researchers are also studying how the various kinds of *B. cepacia* are genetically related to each other, and what characteristics of *B. cepacia* contribute to disease in susceptible individuals.

II. Use Sites, Target Pests, and Application Methods

- **Use sites:** Many food and non-food crops outdoors and in greenhouses.
- **Target pests:** Fungi, such as Rhizoctonia, Pythium, and Fusarium, that cause damping off disease; certain nematodes that attack plant roots.
- **Application methods:** Products containing the active ingredients are applied directly to soil, roots or seeds. No foliar sprays or inhalable aerosols are permitted.

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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

Based on various toxicity tests, and on precautions on the product labels, EPA does not expect strains M54 and J82 to harm humans. However, scientists are seeking ways of predicting which *B. cepacia* strains may be capable of infecting individuals with cystic fibrosis or chronic granulomatous disease.

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IV. Assessing Risks to the Environment

When used as directed, products containing *B. cepacia* type Wisconsin strains M54 or J82 present no known risks to plants, beneficial insects, birds, mammals, or other non-target organisms or the environment.

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V. Regulatory Information

B. cepacia type Wisconsin strains M54 and J82 were registered in 1996. As of November 2001, there were a total of 5 registered pesticide products containing these active ingredients.

VI. Registrant Information

Stine Microbial Products
2225 Laredo Trail
Adel, IA 50003

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VII. Additional Contact Information:

[Ombudsman, Biopesticides and Pollution Prevention Division](#) (7511P)
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Environmental Protection Agency
1200 Pennsylvania Avenue, NW
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