

# **GRAPES**

## General Information

## Product Information

This package contains Serifel Biofungicide, a wettable powder (WP). The active ingredient in Serifel is *Bacillus amyloliquifaciens* strain MBI600, a biological agent providing suppression of listed foliar and soilborne plant diseases. Apply Serifel preventively in low to medium disease pressure situations. Serifel can be applied as a foliar spray, a directed or banded spray, a soil or plant drench, as an in-furrow application, or through chemigation. Serifel can be applied alone or in a tank mix with other registered pest control products, unless otherwise noted in the Crop-Specific Directions. Apply Serifel in a regularly scheduled protective spray program and use in a rotation program with other fungicides. Under higher disease pressure situations, tank mix Serifel with registered fungicide products.

## Integrated Pest Management

Serifel can be integrated into an overall disease and pest management program. Cultural practices known to reduce disease development should be followed. Consult your local extension specialist, certified crop advisor and/or BASF representative for additional IPM strategies established for your area. Serifel may be used in agricultural extension advisory (disease forecasting) programs, which recommend application timing based on environmental factors favorable for disease development.

## Application Instructions

Apply rates of Serifel as instructed by the Crop-Specific Directions. Apply Serifel with ground equipment, aerial equipment or through sprinkler irrigation equipment. Equipment must be checked frequently for calibration. If heavy rainfall or irrigation occurs shortly after application, reapplication of Serifel may be necessary.

Under low-level disease conditions, the minimum application rates can be used while maximum application rates and shortened spray schedules are to be used for severe or threatening disease conditions. Tank mixing Serifel with other fungicides can also improve performance.

#### Instructions for Directed or Banded Sprays Related to Ground Applications

The application rates shown in the Crop-specific Directions on the label reflect the amount of product to be applied uniformly over an acre of ground on a broadcast basis. In some crops, Serifel® Biofungicide

may be used as a directed or banded spray over the rows or plant beds with the alleys or row middles left unsprayed. For such uses, reduce the labeled Serifel rates in proportion to the area actually sprayed. This adjustment is necessary to avoid applying the product at use rates higher than permitted according to label directions. The following formula may be used to determine the broadcast equivalent rate for doing directed or banded sprays (See label for formula.)

#### Limitations, Restrictions, and Exceptions

#### Product Information

This package contains Serifel, a wettable powder (WP). The active ingredient in Serifel is *Bacillus amyloliquefaciens* strain MBI 600, a beneficial microbe providing suppression of listed foliar plant diseases in certain agricultural field crops. Apply Serifel preventively in low to medium disease pressure situations. Serifel can be applied as a foliar spray or a directed or banded spray. Serifel can be applied alone or in a tank mix with other registered pesticide products, unless otherwise noted in the Crop-Specific Directions. Apply Serifel in a regularly scheduled protective spray program and use in a rotation program with other registered pest control products. Under higher disease pressure situations, Serifel can be tank-mixed with other registered pesticide.

## Application Instructions

Apply rates of Serifel as instructed by the Crop-Specific Directions. Apply Serifel with ground equipment, aerial equipment or through sprinkler irrigation equipment. Equipment must be checked frequently for calibration. If heavy rainfall or irrigation occurs shortly after application, reapplication of Serifel may be necessary.

Under low-level disease conditions, the minimum application rates can be used while maximum application rates and shortened spray schedules are to be used for severe or threatening disease conditions.

Tank mixing Serifel with other registered pesticide products can also improve performance.

## Restrictions and Limitations

- Crop Rotation Restriction - None
- Preharvest Interval (PHI) - 0 Day
- Re-entry Interval (REI) - 4 hours
- Not for use in greenhouse or transplant production
- Not for use in California on crops marked with an asterisk (\*) in Crop-Specific Directions

## Application Directions

For *Botryosphaeria* dieback, *Phomopsis* dieback, and Esca, apply to pruning wounds. Sanitation of pruning tools is critical.

For *Macrophoma* rot, apply to pruning wounds. Sanitation of pruning tools is critical. For foliar symptom suppression during the growing season, apply just after bloom and continue on 7 - 10 day intervals until harvest when environmental conditions are conducive for disease development.

For *Phomopsis* cane and leaf spot, begin applications between bud break and 1 inch shoots and repeat when shoots are 6-8 inches long.

Mix and apply Serifel in sufficient water volume to ensure uniform dispersion in spray tank and thorough coverage of foliage and shoot tissue.

## Method

[Foliar spray](#)

[Directed Spray](#)

[Band spray](#)

[Foliar spray](#)

[Directed Spray](#)

[Band spray](#)

Rates

[field rates 0](#)

[field rates 1](#)

•

Restricted Entry Interval

4 hours

Exception: if the product is soil-injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

Timings

[Macrophoma rot: After bloom](#)

[Macrophoma rot: After bloom](#)