



Product Description and Specification

BACTERIAL AMYLASE P

Description

Bacterial Amylase P is an alpha-amylase produced by submerged fermentation of a selected strain of *Bacillus amyloliquefaciens*. The systematic name is 1,4- α -D-glucan glucano-hydrolase (EC 3.2.1.1.).

Bacterial Amylase P is an endo-amylase. It hydrolyzes 1,4- α -glucosidic linkages in amylose and amylopectin at random, which results in a rapid reduction of the viscosity and of gelatinized starch. The breakdown products are dextrans of differing chain lengths, and oligosaccharides.

Specification

Appearance

Bacterial Amylase P is a light brown preparation with densities around 1.1g/ml.

Activity determination

A detailed description of the analytical method is available on request.

Packing

Bacterial Amylase P is available in 25kg jerry cans.

Analysis

The following analytical specifications apply for Bacterial Amylase P

- (i) Activity - Range of 60 Units/g – 80 Units/g
- (ii) pH - Range of 5.0 – 7.0
- (iii) Bacteriostat - Sufficient present to suppress growth of *Staphylococcus aureus* on petri dish.

Storage

When Bacterial Amylase P is stored at a temperature of 25°C, the declared activity is maintained for at least six months. When stored at 5°C, the product will maintain the declared activity for at least one year.

Approval Status	Bacterial Amylase P is produced according to FAO/WHO JECFA and FCC recommendations for food grade enzymes, supplemented with maximum limits of 5×10^4 /g for total viable counts and 10^2 /g for moulds. GRAS petition is filed.
Safety	<p>Enzymes are proteins, and inhalation of dust or aerosols may induce sensitization and may cause allergic reaction in sensitized individuals. Some enzymes may irritate skin, eyes and mucous membranes upon prolonged contact.</p> <p>Bacterial Amylase P may create inhalable aerosols if splashed or vigorously stirred. Spilled product may dry out and create dust, and should be flushed away with water.</p>
Applications	Bacterial Amylase P is a conventional α -amylase operating in the relatively high temperature range of 70 - 90°C. Bacterial Amylase P is used in the starch, alcohol and paper industries.