



ALPHA-AMYLASE (*Bacillus licheniformis*) (Lot 20501)

01/04

PROPERTIES

1. ELECTROPHORETIC PURITY

- Single major band on Isoelectric focusing.
- Single major band on SDS-gel electrophoresis (MW = 58,200)
- 3,000 U/ml (pH 6.5, 40°C, soluble starch as substrate)

2. SPECIFIC ACTIVITY AND LEVEL OF OTHER ACTIVITIES

SUBSTRATE	SPECIFIC ACTIVITY (U/mg Protein)
Ceralpha Reagent (at pH 6.0) (for the measurement of α -amylase)	53.0
<i>p</i> -Nitrophenyl β -maltoside (amyloglucosidase)	undetectable
CM-Cellulose 4M (cellulase)	undetectable
Carob Galactomannan (α -mannanase)	undetectable

3. PHYSICOCHEMICAL PROPERTIES

pH Optima	6.0-6.5
pH Stability	4.5-8.0
Temperature Optima	75°C
Temperature Stability	<80°C

4. STORAGE CONDITIONS

The enzyme is supplied in vials of 40 ml, as a solution in 50% glycerol plus sodium benzoate (0.2%), and should be stored at 4°C.

The concentration of enzyme as supplied is 3000 U/ml on Ceralpha Reagent at pH 6.0 and 40°C. This enzyme is recommended for use in **Total Dietary Fibre** analytical procedures and the **Megazyme Total Starch test** method. The preparation is effectively devoid of cellulase and is free of catalase.