



α -GLUCOSIDASE from *Bacillus stearothermophilus* (Lot 151101a)

E-TSAGL

11/15

PROPERTIES

1. ELECTROPHORETIC PURITY:

- Single major band on SDS-gel electrophoresis (57,750)
- Two bands on isoelectric focusing (pI's 5.3 and 5.5)

2. SPECIFIC ACTIVITY AND LEVEL OF OTHER ACTIVITIES:

Substrate	Enzyme Measured	Specific Activity (U/mg protein)
<i>p</i> -NP- α -Glucoside	α -Glucosidase	101.0
Maltose	α -Glucosidase	177.0
Phenyl α -glucopyranoside	α -Glucosidase	58.8
Blocked <i>p</i> -NP-Maltoheptoaside	α -Amylase	< 0.0001

All activities were measured at pH 6.5 and 40°C. Glycosidase activities were measured using the appropriate *p*-nitrophenyl- or phenyl-glycoside (at 10 mM). α -Amylase was measured using Blocked *p*-NP-maltoheptoaside reagent. One Unit of enzyme activity is the amount of enzyme required to release one μ mole of *p*-nitrophenol per min from the appropriate substrate at pH 6.5 and 40°C.

3. PHYSICOCHEMICAL PROPERTIES:

pH Optima:	6.0-7.0
pH Stability:	5.0 - 11.0.
Temperature Optima:	60°C
Temperature Stability:	< 60°C

4. STORAGE CONDITIONS:

The enzyme is supplied as an ammonium sulphate suspension in the presence of 0.02% sodium azide and should be stored at 4°C. On dissolving in buffer or water, the enzyme should be stored in the frozen state.

We recommend the inclusion of BSA (0.5 mg/mL) in all buffers.

The concentration of enzyme as supplied is approximately 750 Units/mL.