



-AMYLASE from BARLEY (Lot 50302)

E-BARBL

06/03

PROPERTIES

1. ELECTROPHORETIC PURITY

- Crystalline.
- Single band on SDS-gel electrophoresis (MW = 58,300)
- Two major bands on isoelectric focusing (pI's 5.4 & 5.7); minor band at pI 5.0.

2. SPECIFIC ACTIVITY:

SUBSTRATE	ACTIVITY (U/mg)
Starch (10 mg/ml, pH 6.0, 40°C)	1400
<i>p</i> -NP-Maltopentaoside	1600

3. CONTAMINANTS

- Amylase < 1 part per 2 million of β -amylase

4. PHYSICOCHEMICAL PROPERTIES

pH Optima	6.0
pH Stability	4.5-8.0
Temperature Optima	60°C
Temperature Stability	< 60°C

5. STORAGE CONDITIONS

The enzyme is supplied as an ammonium sulphate suspension in 0.02% sodium azide and should be stored at 4°C.

NOTE: This enzyme is also supplied in powder form at 50,000 International Units (starch substrate, as above) per gram. The bulking agent is BSA and ammonium sulphate. This activity is approximately equal to 5,000° Lintner (this is 2.5 times more concentrated than the enzyme routinely used in AACC and ASBC α -amylase assay procedures).