β-AMYLASE FROM BARLEY (Powder, Lot 130802)

E-BARBP-2G **08/15**

(EC 3.2.1.2) 4-alpha-D-glucan maltohydrolase
CAZy: GH Family 14

PROPERTIES

1. ELECTROPHORETIC PURITY:

Before addition of BSA this enzymes appears as:
- 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
- Prepared from a crystalline enzyme

2. ACTIVITY:

Substrate	Activity (U/g)
Betamyl-3	500 U/g
Starch (10 mg/mL, pH 6.0, 40°C)	20,000 U/g

3. CONTAMINANTS:

α-Amylase	< 1 part per 2 million of ß-amylase
α-Glucosidase (on maltoheptose)	< 1 part per 2 million of ß-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 a powder freeze-dried in the presence of BSA, and should be stored at -20°C.

The enzyme, as supplied (in the presence of BSA) has an activity of 20,000 International Units per gram (on starch substrate, as above); (500 Betamyl-3 Units/g).
This activity is equal to 2,000° Lintner. **This enzyme is routinely used in AACC and ASBC methods to make β-Limit Dextrin for α-amylase assay procedures.**