

# **PROTEASE (Subtilisin A) from Bacillus licheniformis (Lot 130602a)**

**E-BSPRT-40ML** (EC 3.4.21.14 )

03/15

# PROPERTIES

# I. PURITY:

- Single major band on SDS-PAGE (MW = 30,250); minor bands at MW < 30,000
- Single major band on isoelectric focusing (pl 8.8); minor band at pl 9.3

#### 2. SPECIFIC ACTIVITY AND LEVEL OF OTHER ACTIVITIES:

- Specific activity > 8 tyrosine-equivalent Units/mg
- Essentially devoid of B-glucanase

One Unit will hydrolyse casein to produce colour equivalent to 1.0  $\mu$ mole (181 $\mu$ g) of tyrosine per minute at pH 7.0 at 40°C (colour by Folin-Ciocalteu reagent).

# 3. PHYSICOCHEMICAL PROPERTIES:

| pH Optima:             | 7.0-7.5                             |
|------------------------|-------------------------------------|
|                        | (60% of maximal activity at pH 6.0) |
| pH Stability:          | 5.5-10.0                            |
| Temperature Optima:    | 60°C                                |
| Temperature Stability: | < 60°C                              |

# 4. STORAGE CONDITIONS:

The enzyme is supplied in vials of 40 mL, as a solution in 50% glycerol, 10% KCl and 0.2% (w/v) sodium benzoate, and should be stored at  $4^{\circ}C$  (or at -20°C for long-term storage i.e 2-5 years).

The concentration of enzyme as supplied is 50 mg/mL (i.e. 400 U/mL) at 40°C. This enzyme is recommended for use in AOAC INTERNATIONAL Total Dietary Fibre analytical procedures.