



# EnerZyme® P7

Neutral protease for proteolytic increase in unsolved malt or adjuncts

## Product description

Concentrated liquid enzyme preparation from *Bacillus subtilis* for protein degradation in vegetable raw materials.

- Increase of protein modification during mashing
- Release of amino acids and peptides to improve yeast nutrition during alcoholic fermentations
- Prevention of delayed protein-based reactions in beverages and semi-finished products

## Dosage

The enzyme dosage depends on the quality of the raw material, temperature and contact time.

The following guide values apply:

Brewing process:

150 - 250 mL/ton malt with insufficient degree of protein modification

350 - 700 mL/ton malt with raw grain/adjunct

Distilling mashes from cereals or potatoes:

75 mL/ ton raw material

## General Characteristics

Enzyme characteristics: the activity range of the enzyme is between pH 5.0 and 10.0, the optimum is at pH 7.0 in the presence of calcium (minimum 40 ppm). The temperature range is between 25 °C and 70 °C, the optimum is at 55 °C.

The diagram 1 and 2 show the influence of temperature and pH-value on the enzyme activity of EnerZyme® P7.

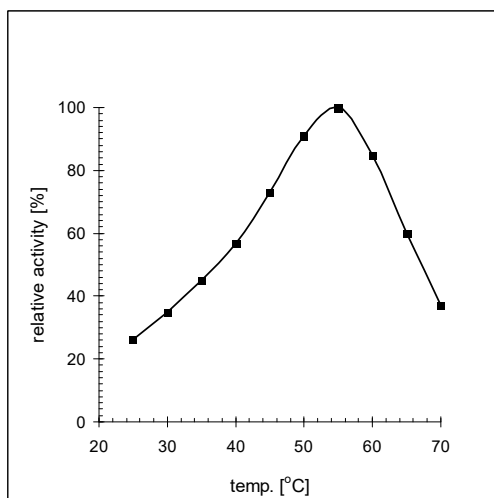


Fig 1: Influence of temperature on activity  
(2 % casein solution; pH 7.0).

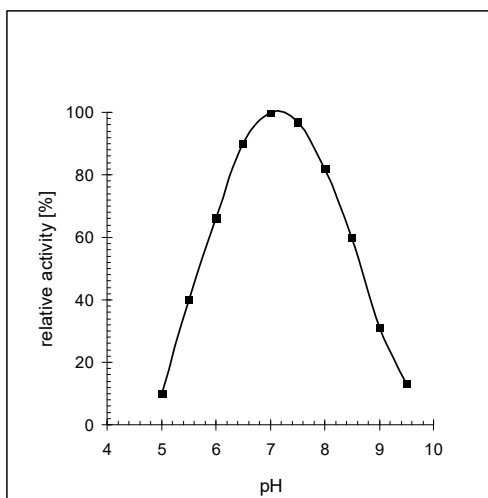


Fig 2: Influence of pH-value on activity  
(2 % casein solution; 55 °C).

## Storage

Store cool. Reseal opened packagings tightly and use up as soon as possible.

## Please note

When applying EnerZyme® P7 the food regulations of the individual countries currently in force have to be adhered to.