

## Promod™ 194SP - P194SP

- High performance protease
- High in carboxy-peptidase
- Significant de-bittering action
- Neutral to alkaline pH activity
- Microbially derived

Biocatalysts specialises in enzymes for the modification and hydrolysis of food protein substrates. The majority of these products are the main part of our Promod™ (PROtein MODification).

This range includes animal, microbial and plant derived enzymes. In addition to the datasheets a Technical Bulletin (number 101) exists to give our clients an overview on the use of these enzymes in Egg Processing.

Promod™ 194SP is a fungal neutral peptidase suitable for use in the secondary hydrolysis of proteins initially solubilised by broad spectrum general proteases. It is ideal when a reduction of peptide size and removal of bitterness is required contributing greatly to flavour development and control in enhanced savoury flavours.

It is useful for non-meat products and eggs where foaming ability can be improved by a minor modification of the egg white proteins.



### S P E C I F I C A T I O N

Activity	200 units of Casein protease per gram of solid
Biological Source	<i>Aspergillus oryzae</i>
Form	Brown powder
Working pH	6 - 9
Temperature range	50 - 60°C

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## APPLICATION & DOSAGE

Promod™ 194SP is soluble in aqueous systems and performs well in the pH range 6.0 to 9.0. It demonstrates good levels of activity at 40-55°C. The exact level of application of Promod™ 194SP will depend on the protein substrate and the level of modification required. The degree of hydrolysis resulting from action upon a particular protein or protein system will be in proportion to the enzyme dose when pH, time and temperature are constant. For a high degree of hydrolysis 0.5 -1% based on protein weight is recommended as an initial guide and for a moderate degree of hydrolysis 0.2-0.5%. Varying pH time and temperature will also influence the final outcome.

### HEALTH AND SAFETY

Always read the Health and Safety sheet (MSDS) before use and retain. If you are in any doubt about recommended product handling and safety, please contact Biocatalysts before use. Generally, when using enzymes avoid contact with the skin and eyes and do not breathe dusts or aerosols containing them.

### STORAGE

Activity will remain above the minimum analysis specification for at least 12 months from the date of the Batch Certificate of Analysis, if stored dry, away from direct heat or sunlight below 25°C.

### ALLERGENS

Wheat protein hydrolysate is used as a fermentation substrate. Lactose is used as the diluent.

### FOOD STATUS

Prepared from enzymes of GRAS status and manufactured to FCC/JECFA/WHO/FAO recommendations for enzymes used in food processing.

### QUALITY

#### 1. Food Safety Policy

The company operates a Hazard Analysis at Critical Control Points (HACCP) system. This ensures that ingredients and the production environment are regularly monitored for contamination and that the processes are designed to produce safe products every time.

#### 2. Good Manufacturing Practice (GMP)

The company's integrated management system encompasses Total Quality, Health and Safety, Food Safety and GMP.

#### 3. ISO9001

Biocatalysts Ltd is certified to BS ISO9001: 2000. Regular Audits are carried out by the British Standards Institute (BSI) to ensure continuing compliance with the standard.

### AVAILABILITY

Powders: standard 25kg nett poly-lined fibre kegs. Non-standard quantities of 1kg and 5kg are also available for some products, please enquire.



The production micro-organism used in this product is not a GMO. Within the proposed guidelines of the European Union regarding Genetically Modified products, the above product would be classed as GMO free.

