

Promod™ 215P - P215P

- Microbial endo-protease
- High in amino- and carboxy- peptidases
- EMC production
- Protein notes without bitterness
- Vegetarian and kosher products

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™ range (PROtein MODification).

This range includes animal, microbial and plant derived enzymes. In addition to the datasheets, many application notes and Technical Bulletins exist to assist our clients in the use of these products.

Promod™ 215P is a protease particularly suited for manufacture of EMCs where proteins notes are required without the associated bitterness. The peptidases present in this product result in the debittering of any bitter peptides produced by action of the protease.

When combined with our Lipomod™ products it gives a full cheese flavour with fatty and protein notes.



SPECIFICATION

Activity	120 Protease units/gram
Biological Source	<i>Aspergillus spp</i>
Form	Off white powder
Working pH	5.5 - 6.5
Temperature range	45 - 55°C

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APPLICATION & DOSAGE

Promod™ 215P has optimum activity at slightly acid pH, no pH adjustments are required whether milk, milk fat or actual cheese is used. In the production of EMC the shredded cheese is mixed with emulsifying agents to obtain a slurry of 40-55 % dry solids. This is pasteurised and cooled to 40-50°C. Promod™ 215P should then be added at 0.05 to 0.1% w/w on solids and the mix incubated. The incubation time can be from 8 - 36 hours and will depend on the enzyme dose, temperature, substrate and flavour intensity required. Intensity will increase as the reaction proceeds. Trials will be required to determine the exact conditions. The enzyme is deactivated by temperatures above 80°C. Lipomod™ 187P can be used at the same time for concurrent production of fatty flavour notes. If even lower bitterness is required Flavorpro™ 192P should be added.

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, when stored below 20°C.

ALLERGENS

Soy and wheat protein are used as fermentation substrates. 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.

