

Promod[®] 511MDP

P511MDP

Features/Benefits

- Microbial protease (endopeptidase and exopeptidase activities)
- EMC production
- Protein notes without bitterness

Promod[®] 511MDP is a protease particularly suited for manufacture of Enzyme Modified Cheeses (EMCs) where protein notes are required without the associated bitterness. The exopeptidases present in this product result in the removal of any bitter peptides produced by action of the endopeptidase. When combined with our Lipomod[®] products Promod[®] 511MDP gives a full cheese flavour with fatty acid and protein notes.

Specification

Activity	> 100 Casein Protease U/g
Biological Source	<i>Bacillus sp., Aspergillus sp.</i>
Form	Off-white to brown powder
Optimum pH Range	7.0 - 9.0
Optimum Temperature Range	45 - 65°C

Application & Dose

In EMC production, the shredded cheese is mixed with water and emulsifying agents to obtain an EMC slurry of 55-85% of cheese (40-55% of dry solids). The slurry is pasteurised and cooled to 40-50°C, prior to the addition of the enzymes. The recommended dosage for P511MDP is 0.05-0.1% w/w on cheese in the EMC slurry. The mixture can then be incubated for 8-36h, depending on the enzyme dose, incubation temperature and substrate. Trials will be required to determine the exact conditions in order to achieve the desired strength of protein notes. The enzyme is deactivated above 80°C at the end of the incubation. Lipomod[®] 187MDP can be used at the same time for concurrent production of fatty acid flavour notes. If even lower bitterness is required Flavorpro[®] 91MDP should be added in combination with Promod[®] 511MDP. Please contact Biocatalysts for further technical support.

Health & Safety

Always read the Material Safety Datasheet (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. MSDSs are available in other languages. Please contact Customer Services.

Storage

Powders: Activity will remain within specification for at least 12 months from the date of manufacture when stored at 0 - 20°C.

Allergens

Refer to allergen statement.

Food Status

Material complies with the JECFA/FAO/WHO and FCC recommended specifications for enzymes used in food processing.

GM Status

This product has been manufactured using a fermentation process of a microbial organism that has not been altered using modern biotechnology. This product does therefore not require labelling as GMO on food labels.

Quality & Food Safety

Biocatalysts 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.

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

Biocatalysts Ltd is certified to ISO9001, ISO14001, ISO45001 and FSSC 22000.

Certificates are available on request from the Customer Services Department.

Availability

Powders: standard 25kg net poly-lined, 100% recyclable cardboard box. Non-standard quantities are also available for some products, please enquire.