

# Promod® 903MDP

#### Features/Benefits

- · Microbial protease
- EMC production
- Sharp savoury protein flavour
- Kosher, Halal and vegetarian status available

**Promod® 903MDP** is a protease particularly suited for manufacture of EMCs where sharp protein notes are required. Promod® 903MDPcan be used on its own or in combination with Biocatalysts' dairy lipases (Lipomod® products). Promod® 903MDPgenerates a sharp (aged cheese) savoury taste in EMC applications.

## **Specification**

Activity	Endopeptidase 120 u/g (casein substrate)
Biological Source	Aspergillus sp., Bacillus sp.
Form	Off white to brown powder
Optimum pH Range	5.5 - 7.5
Optimum Temperature Range	45 - 55°C

#### **Application & Dose**

Promod® 903MDPhas optimum activity at neutral to slightly acidic pH so no pH adjustments are required whether cheese, milk fat or milk is used. 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 Promod® 903MDPis 0.05-0.2 % 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. Biocatalysts' dairy lipases (Lipomod® products) can be used at the same time for concurrent production of fatty acid flavour notes. 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 preventative risk-based Food Safety System that ensures the environment and processes are designed to produce safe products every time. FSSC22000 and FSMA compliant.

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

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.



Visit our website for further relevant & current information www.biocatalysts.com