

# Promod® 845MDP

## P845MDP

## Features/Benefits

- · Microbial protease
- EMC production
- Creamy savoury flavour with low bitterness
- Kosher, Halal and vegetarian status available

**Promod® 845MDP** is a protease particularly suited for the manufacture of EMCs where creamy protein notes are required. The exopeptidases present in this product result in the removal of any bitter peptides. Promod® 845MDP can be used on its own or in combination with Biocatalysts' dairy lipases (Lipomod® products). Promod® 845MDP generates cooked, caramel and nutty flavours with very low bitterness, producing a creamy savoury taste in EMC application.

# **Specification**

Activity	115 U/g Casein Protease
Biological Source	Aspergillus sp.
Form	Off white to brown powder
Optimum pH Range	5.5 - 7.5
Optimum Temperature Range	45 - 55°C

### **Application & Dose**

Promod<sup>®</sup> 845MDP has 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<sup>®</sup> 845MDP is 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<sup>®</sup> 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.

#### Storage

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

#### **Allergens**

Refer to allergen statement.

#### **Food Status**

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

#### **GM Status**

This product does not contain GMMs or genetically modified material.

# Quality

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.



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Biocatalysts Ltd.