

# Flavorpro® 373MDP

### F373MDP

#### Features/Benefits

- · High glutaminase production
- Microbially derived
- Savoury flavour enhancement
- · Soya, wheat, and vegetable hydrolysis
- Improved protein solubility and digestibility

**Flavorpro® 373MDP** is an endoprotease preparation derived from Bacillus subtilis and containing a high level of glutaminase side activity. Normally protease preparations do not contain significant amounts of glutaminase activity, which further modifies the peptide chain so that glutamate with its savoury flavour characteristics is released. As well as giving savoury type flavours it also contributes to improving the solubility and digestibility of the proteins.

## **Specification**

Activity	90 U/g Casein Protease
Biological Source	Bacillus sp.
Form	Off white to brown powder
Optimum pH Range	6.0 - 8.0
Optimum Temperature Range	55 - 60°C

# **Application & Dose**

The glutaminase in **Flavorpro® 373MDP** only works on free glutamine and short peptides containing glutamine (it does not work on intact proteins). Flavorpro® 373MDP has optimum activity at neutral pH (6.5-7.5). Temperatures in the range 55 - 60°C are considered best. The enzyme should be dosed between 0.5 and 1 % w/w based on the protein. The incubation time will depend on the dose, temperature, and desired effect. This might typically be 16 hours when the recommended dose and temperature are utilised. Trials will be required in order to determine the exact conditions. Where substantial hydrolysis of the protein (DH > 35%) is required, it is recommended that a more potent protease be used in combination with Flavorpro® 373MDP. A papain base activity such as the Promod® 144 range should be suitable.

#### **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