

# Promod® 324L

#### P3241

#### Features/Benefits

- High performance proteinase
- · Solubilisation of meat and fish proteins
- Particularly active on animal tissue
- Ideal for extraction of chondroitin sulphate

**Promod® 324L** is a microbial endopeptidase preparation with broad substrate specificity. P324L can be used to efficiently hydrolyse animal proteins including tendons and ligaments. The degradation of animal proteins using P324L can increase solubility, reduce the viscosity of the proteins and improve its digestibility. P324L is also shown to be highly efficient in the extraction of chondroitin sulphate from collagenous material such as trachea.

### **Specification**

Activity	215 Casein Protease U/g minimum
Biological Source	Carica papaya, Bacillus sp.
Form	Brown liquid
Optimum pH Range	7.0 - 10.0
Optimum Temperature Range	55 - 65°C

## **Application & Dose**

The exact level of application of **Promod® 324L** will depend on the protein substrate and the level of modification required. Dose levels should be determined by hydrolysis lab tests. For hydrolysis of animal proteins Promod® 324L displays optimal activity at neutral to alkaline pH and a temperature range of 55-65°C. A dose of 0.5-1.0% w/w (based on weight of protein) of Promod® 324L should be trialled to hydrolyse animal proteins. The enzyme incubation time will depend on the functionality and hydrolysate requirement.

A general guide to dose for chondroitin extraction is a dose of 0.5% w/w of Promod<sup>®</sup> 324L on the cartilage is adequate for full breakdown and chondroitin release. The enzyme can be used in a buffered system or water alone can be used (The natural pH of the water system falls within the pH optimum range of the enzyme). The incubation should be carried out overnight (16 hours) at 65°C (shorter times can be used if the enzyme dose is increased).

## **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

Liquids: Activity will remain within specification for at least 6 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 does not contain GMMs or genetically modified material.

# **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**

Liquids: standard 25kg net plastic jerry cans. Non-standard quantities are also available for some products, please enquire.

