

Protease 200 - C541P

- High performance protease
- Broad substrate specificity
- Powerful solubilising action
- Ideal for gluten modification

Traditionally low levels of protease were added as a component of the amylase mix in breadmaking. As enzyme companies increasingly purify their enzymes to higher and higher levels the often beneficial proteases which were components of improvers are now absent. Addition of low levels of Protease 200 may increase the quality of the bread.

Protease 200 gives rise to numerous beneficial effects when used as part of the improver mix or directly in the bake. There is an increase in loaf volume, which is accompanied by improved crumb softness. In addition the crust colour is improved and there is an increase in the flavour of the bread. It is recommended that this enzyme is used in conjunction with an amylase, eg A011P.



SPECIFICATION

| | |
|-------------------|--------------------------|
| Activity | 100 Casein protease U/g |
| Biological Source | <i>Bacillus subtilis</i> |
| Form | Off white powder |
| Working pH | 5.0 - 7.5 |
| Temperature range | 40 - 60°C |

sheet no: 001/2

issue date: 20:03:03



APPLICATION & DOSAGE

Protease 200 is soluble in aqueous systems and performs well in the pH range 5 to 7.5. It demonstrates good levels of activity at 40 - 60°C and a temperature of 55°C is recommended as optimum. The degree of hydrolysis resulting from the action upon a particular protein or protein system will be in proportion to the enzyme dose when pH, time and temperature are constant. For a high degree of hydrolysis a dosage of 2.5 - 5.0% w/w based on protein weight is recommended as an initial guide. Trials are recommended to determine the exact conditions necessary to achieve the desired effect.

HEALTH AND SAFETY

Always read the Health and Safety sheet (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

Activity will remain above the minimum analysis specification for at least 6 months from the date of the Batch Certificate of Analysis, when stored below 20°C.

ALLERGENS

Soy protein hydrolysate and wheat flour are used as fermentation substrates. Lysozyme (from egg) as a processing aid.

FOOD STATUS

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

QUALITY

1. Food Safety Policy

The company 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.

2. Good Manufacturing Practice (GMP)

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

3. ISO9001

Biocatalysts Ltd is certified to BS ISO9001: 2000. Regular Audits are carried out by the British Standards Institute (BSI) to ensure continuing compliance with the standard.

AVAILABILITY

Powders: standard 25kg nett poly-lined fibre kegs. Non-standard quantities of 1kg and 5kg are also available for some products, please enquire.

The production micro-organism used in this product is not a GMO. Within the proposed guidelines of the European Union regarding Genetically Modified products, the above product would be classed as GMO free.

