BIOCATALYSTS

Promod™ 388P - P388P

DATA SHEET BAKING

- Increases loaf volume
- Improves crust colour
- Standardises protein content of dough
- Improves crumb softness
- Ideal for use with amylase enzymes

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 Promod™ 388P may increase the quality of the bread.

Promod™ 388P 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	40 Protease units/gram
Biological Source	*Aspergillus sp.*
Form	Off white powder
Working pH	5.5 - 7.5
Temperature range	50 - 60°C

sheet no: 001/2

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APPLICATION & DOSAGE

As with all of Biocatalysts' baking enzymes the exact dose will need to be determined for each process. However as a guide Promod™ 388P should be used at approximately 10 - 75 ppm. This dosing information is only indicative. Precise data can only be obtained through practical testing and baking trials. Biocatalysts will be happy to provide further suggestions and comment on the use of this enzyme.

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 12 months from the date of the Batch Certificate of Analysis, when stored below 20°C.

ALLERGENS

Soy and wheat protein are used as fermentation substrates. Wheat flour is used as the diluent.

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.