

## Depol™ 454P - D454P



- Pentosanase optimised for baking
- No detectable side activities
- Stable in acidic type bread improvers
- Improves volume and crumb texture
- Use in fresh, frozen or retarded doughs

Depol™ 454P is a specialised enzyme suitable for use in a variety of baking and bread improver applications. This enzyme is particularly suited for use in products with acidic - type bread improvers due to its stability under acid type conditions.

The product is quite potent and so a low dose is required in most applications. This enzyme is supplied as a non - dusting powder.

The main benefit of Depol™ 454P is the absence of any detectable side activities. This means that it will not affect the dosing of other enzymes in the process, or in the improver preparation.

In addition use of Depol™ 454P increases loaf volume, extends loaf shelf life and results in improved dough handling characteristics in fresh, frozen and retarded doughs.

### SPECIFICATION

Activity	880 Pentosanase units/gram
Biological Source	<i>Bacillus subtilis</i>
Form	Off white powder
Working pH	5.5 - 6.5
Temperature range	45 - 55°C

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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 Depol™ 454P should be used at approximately 10 - 30 ppm based on weight of flour. 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.

Bake trials using this enzyme at a concentration of 20 ppm based on wheat flour resulted in bread with a characteristic 'open' structure associated with European style bread. A softer crumb was obtained in the enzyme treated loaf compared with the control.

### 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

Wheat protein used as a fermentation substrate. Wheat flour is used as a diluent in this product.

### 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.

This product contains a component produced by contained fermentation of a self-cloned organism. All other components are produced without the use of Genetically Modified products.

