

Lipomod™ 29P - L029P

- Mixed esterase/lipase/protease
- EMC production
- Cheddary type flavours
- General fat hydrolysis
- Contains animal derived enzymes

Lipases and esterases hydrolyse triglycerides to liberate fatty acids. Fatty acids have strong flavour characteristics and are responsible for the flavours associated with many products derived from both dairy and non-dairy fats. These enzymes are widespread throughout nature and vary with regards to their action on different triglycerides.

Lipomod™ 29P is a special blend of animal and fungal lipases. It contains both lipase and esterase activity. The combination of animal with a fungal lipase has shown to be particularly effective in breaking down of animal fats and for enzyme modified cheese (EMC) they can be used to produce concentrated specific flavours. It is active against all 3 positions on the triglyceride molecule. It is also useful for fatty acid production as precursors for Maillard reactions.



SPECIFICATION

Activity	15 000 Esterase units/gram
Biological Source	<i>Candida cylindracea</i> /Porcine Pancreas
Form	Off white powder
Working pH	6 - 8
Temperature range	40 - 50°C

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APPLICATION & DOSAGE

Although Lipomod™ 29P has a broad pH profile and continues to function at pH 3.0 - 5.0, an initial pH of 8 is recommended. This is because the pH will drop as the reaction proceeds due to the release of fatty acids. Temperatures around 40 - 45°C are recommended. For hard fats the temperature should be sufficiently high to ensure that the fat is in the liquid state. The fat should be in the form of a fine emulsion (50% is suitable). The smaller the globule size the faster the reaction. (Emulsifiers such as chocolate and lecithin as well as synthetic emulsifiers will aid in producing a suitable emulsion.) The recommended dose rate depends on the application. A dose of 0.2 - 1 % w/w fat is suggested but trials will be required in order to determine the exact conditions necessary. For use in EMC production, see our technical bulletin number 103.

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 protein is used as a fermentation substrate. This product contains lactose.

FOOD STATUS

Produced 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 20kg 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.

