

Lipomod™ 299P - L299P

- High esterase activity for short chain fatty acid release
- High potency for cost-effective emc manufacture
- Gives a cheddary-type fatty acid profile
- Contains low protease levels to introduce protein notes

Lipomod™ 299P is a mixed esterase/lipase /protease of animal origin. It has a high esterase to lipase ratio, and produces a typical cheddar type flavour without too many blue notes. A low level of protein notes is produced, where these are deemed to be too bitter the process should be supplemented with our amino-peptidase Flavorpro™ 192P.

Lipomod™ 299P can also be used in combination with Promod™ 215P where a less sharp and more

protein type flavour is required. Lipomod™ 299P contains animal derived enzymes for the production of a standard non-blue EMC. It is therefore not suitable for vegetarian or Kosher products where Lipomod™ 187P should be used instead.

As with all Biocatalysts products if this profile is not exactly right an individually tailored Lipomod™ can be produced for a client.



S P E C I F I C A T I O N

Activity	2,000 Esterase U/g (Tributylin as substrate)
Biological Source	Porcine Pancreas
Form	Off white powder
Working pH	5 - 7
Temperature range	45 - 55°C

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APPLICATION & DOSAGE

Lipomod™ 299 has optimum activity at neutral pH, but is still highly active at pH 5 and is ideal for use on both milk and cheese. Its temperature optimum is in the range of 45-55°C. Lower temperatures can be used for longer incubation times but great care should be taken to avoid microbial contamination.

The dose rate is dependent on both the chosen reaction time and the temperature. There is no one best set of conditions. The flavour intensity will increase as the reaction hydrolysis proceeds, but also there will be a slight change in flavour profile. So trials will be necessary to identify the reaction conditions that will give the desired flavour. Recommended conditions to try initially are a dose rate of 0.1-0.3% w/w on cheese at a temperature of 45°C and a reaction time of 16 hours.

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

ALLERGENS

Lactose is used as a 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.

