

Lipomod[®] 34MDP

L034MDP

Features/Benefits

- Highly active lipase with broad specificity
- Cost effective lipase for general fat hydrolysis (dairy and animal fats, butter, oils, egg)
- Can be used for esterification reactions
- Kosher, Halal and vegetarian status

Lipomod[®] 34MDP is derived from the yeast *Candida*. It possesses high lipase and esterase activity; making this enzyme a cost effective solution for a wide range of fat hydrolysis applications. It is broadly active against short, medium and long chain fatty acids on all 3 positions on the triglyceride molecule with both hard and soft fats. Since it is a non-animal product Lipomod[®] 34MDP is suitable for vegetarian, Kosher and Halal products.

Lipases and esterases hydrolyse triglycerides to liberate free fatty acids (FFA). These enzymes are widespread throughout nature and they possess different activities and specificities towards triacylglycerol substrates (fat). Fatty acids have strong flavour characteristics and are responsible for the flavours associated with many products derived from both dairy and non-dairy fats. Under appropriate conditions Lipomod[®] 34MDP can also catalyse esterification reactions of both natural and artificial substrates.

Specification

Activity	Lipase 115,000u/g (Olive oil substrate)
Biological Source	<i>Candida sp.</i>
Form	Off-white to brown powder
Optimum pH Range	5.0 - 8.0
Optimum Temperature Range	40 - 55°C

Application & Dose

Lipomod[®] 34MDP has a broad pH profile so no pH adjustments are generally required. An exception would be where almost complete hydrolysis of a high fat emulsion is required: it is then best to keep the pH around 7. Temperatures around 40-45°C are recommended. For hard fats the temperature should be sufficiently high so that the fat is in a liquid state. The fat should be in the form of a fine emulsion (50% is suitable); the smaller the globule size the faster the rate of hydrolysis. Lipomod[®] 34MDP is a very active preparation and only small amounts are needed when compared to other lipase preparations. The recommended dose rate depends on the application. A dose of 0.01-0.02% w/w on fat is suggested for general fat hydrolysis. Trials will be required in order to determine the exact conditions necessary. Please contact Biocatalysts for further technical support.

Health & Safety

Always read the Material Safety Datasheet (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

Powders: Activity will remain within specification for at least 12 months from the date of manufacture when stored at 0 - 20°C.

Allergens

Refer to allergen statement.

Food Status

Material complies with the JECFA/FAO/WHO and FCC recommended specifications for enzymes used in food processing.

GM Status

This product has been manufactured using a fermentation process of a microbial organism that has not been altered using modern biotechnology. This product does therefore not require labelling as GMO on food labels.

Quality & Food Safety

Biocatalysts operates a preventative risk-based Food Safety System that ensures the environment and processes are designed to produce safe products every time. FSSC22000 and FSMA compliant.

Compliance - The Company's integrated management system encompasses Quality, Food Safety, Health and Safety and GMP.

Certificates are available on request from the Customer Services Department.

Availability

Powders: standard 25kg net poly-lined, 100% recyclable cardboard box. Non-standard quantities are also available for some products, please enquire.