BIOCATALYSTS | A BRAIN Group company

Lipomod® 322L

L322L

Features/Benefits

- Microbial phospholipase A2 for the production of lyso-lecithin emulsifiers.
- Effective hydrolysis of vegetable lecithins (Soybean, Sunflower, and Rapeseed Oil).
- Can be used for degumming of vegetable oils and transesterification of phospholipids.
- Kosher, Halal, and vegetarian.

Lipomod® 322L is a microbial phospholipase A2 (PLA2) that catalyses the hydrolysis of the sn-2 fatty acid from phospholipids, producing lysophospholipids and free fatty acids (FFAs). This enzymatic reaction offers a targeted and efficient method for modifying the functional properties of lecithin derived from soybean, sunflower, or rapeseed oils.

By converting standard lecithin into lysolecithin, **Lipomod® 322L** significantly enhances its emulsifying capacity, aqueous dispersibility, and stability across a wide pH and temperature range. These functional improvements are highly valuable in food, feed, and nutraceutical applications requiring reliable emulsifier performance under processing and storage conditions.

In addition, **Lipomod® 322L** plays an important role in enzyme-assisted degumming of crude vegetable oils. Its action on phospholipids improves the removal of gums and phosphorous impurities, leading to better oil yield, refining efficiency, and downstream processing performance.

Specification

Activity	>10,000 U/mL
Biological Source	*Microbial*
Form	Brown liquid*
Application pH Range	6.0 – 9.5
Application Temperature Range	35 - 65°C

*during the manufacturing process of Lipomod® 322L small green specks may be visible in the final product, these have no impact to product specification.

Application & Dose

As an initial guide, the **Lipomod® 322L** dosage of 600 - 1000ppm based on oil content in gums can be recommended for hydrolysis of vegetable lecithins at 50 - 55°C for 5 – 24 hours with 20 – 30 % water. pH adjustment is usually not required as the enzyme works well at neutral pH conditions. However, if required, NaOH can be used for pH adjustment. Trials will be required to determine the optimum enzyme dosage and process conditions for **Lipomod® 322L** depending on the exact success requirements of the application.

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. MSDSs are available in other languages. Please contact Customer Services.

Storage

Liquids: Activity will remain within specification for at least 18 months from the date of manufacture when stored at 0-8°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 is not a GMO and does not contain GMOs. 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

Liquids: Available in 20kg packs.

Biocatalysts Ltd.
Cefn Coed, Parc Nantgarw,
Cardiff, Wales,
CF15 7QQ UK.
Tel: +44 (0)1443 843712
Email: enquiries@biocatalysts.com