

# Lipomod® 699L

#### Features/Benefits

- Production of lyso-lecithin emulsifiers
- Enzyme modified yolk provides increased viscosity and heat stability in mayonnaise manufacture
- Higher conversion than microbial phospholipases
- Can be used for degumming of vegetable oils and transesterification of phospholipids
- Low preservative levels comply with Japanese regulations

Biocatalysts supply enzymes that modify the functionality of egg and can therefore be used as an aid to egg processing. During commercial processing eggs are separated into egg white or egg yolk products and the effect of enzymes on this process is covered in depth by our Technical Bulletin titled "The use of Enzymes in Egg Processing."

Egg yolks have extremely useful emulsifying and gelation properties due to the presence of various lipid and protein types. Phospholipids can be modified by the action of Lipomod® 699L to produce lyso-lecithin with superior emulsifying properties especially useful in mayonnaise manufacture. This is a low preservative enzyme designed for the Japanese market.

# **Specification**

Activity	10,000 U/ml minimum
Biological Source	Porcine Pancreas
Form	Pale to dark brown liquid
Optimum pH Range	5.0 – 8.0
Optimum Temperature Range	40 - 50°C

#### **Application & Dose**

Lipomod® 699L can be used to improve the emulsifying properties of egg yolk, whole egg or purified lecithin. Egg yolk or whole egg should be warmed to between 40 - 60°C. If desired up to 20% salt can be added, or the yolk can be diluted with water. It is not usually necessary to adjust the pH of egg yolk if it is between pH 5.0 and pH 8.0. L699L should be added at 1,000 – 2,000 units per litre of egg product. Ensure the enzyme is evenly distributed throughout the mixture with gentle mixing. The reaction takes 2-4 hours to reach completion at 50°C. The modified yolk can then be pasteurised.

### **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 24 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 has not been manufactured from a GMM, and no materials sourced from GMOs have been used during the manufacturing process.

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

Certificates are available on request from the Customer Services Department.

# **Availability**

Liquids: 1kg packs - packed 12 to a box



Visit our website for further relevant & current information