

Catalase - C641L

- Rapid hydrogen peroxide removal
- Stable over wide pH range
- Ideal for milk and egg processing
- Suitable for use after sterilisation

Biocatalysts supply enzymes that modify the functionality of egg and can therefore be used as an aid to egg processing. During processing eggs are pasteurised to eliminate the possible presence of harmful bacteria.

Egg white proteins are particularly susceptible to damage by pasteurisation and to lessen this damage an alternative process using a combination of lower temperatures and hydrogen peroxide can be used.

Residual hydrogen peroxide needs to be eliminated from the egg product with Catalase (C641L), which breaks down hydrogen peroxide into harmless by-products.

Catalase (C641L) is a superior performing catalase enzyme produced by *Micrococcus lysodeikticus*.

A Technical Bulletin (101) entitled Enzymes in Egg Processing gives an overview of this process and the use of enzymes in it.



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

Activity	16500 units/gram (550 Baker Units)
Biological Source	<i>Micrococcus lysodeikticus</i>
Form	Light brown liquid
Working pH	3 - 9
Temperature range	60°C

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APPLICATION & DOSAGE

If hydrogen peroxide has been utilised to assist sterilisation of egg ingredients Catalase (C641L) can be used to remove residual peroxide. Egg ingredients can be first sterilised using hydrogen peroxide. Approximately 1.3 litres of 35% hydrogen peroxide (for one tonne of liquid egg product) is added slowly with mixing and held for 20 minutes. As a guide a dose of 100-150ml of Catalase into one tonne of liquid egg can then be added and mixed. Further set volumes of hydrogen peroxide might then be continually added with mixing over a predetermined interval of time to ensure thorough sterilisation. See Technical Bulletin number 101 for further information.

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 6 months from the date of the Batch Certificate of Analysis, if stored below 25°C away from direct heat or sunlight.

ALLERGENS

Lactose is used as a fermentation substrate.

FOOD STATUS

Prepared from enzymes of GRAS status and manufactured to FCC/JECFA/WHO/FAO recommendation 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

Liquids: standard 25kg net plastic jerry cans. Non-standard quantities of 5kg, 215kg and 1000kg 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.

