

TECHNICAL DATA SHEET

IMMOBILIZED

FERMASE CALB™ - 10000

FBL's Biotech Division - Inspired by life.

Fermase CALB™10000 is an immobilized enzyme catalyst of *Candida antarctica* lipase B expressed in yeast cells.

Product type **Fermase CALB™ 10000** is based on covalent immobilization on polyacrylate beads.

Application Resolution of chiral alcohols and amines; synthesis of fatty-acid esters; versatile applications in organic synthesis; exhibit good to excellent stereoselectivity.

Description Creamish white to white coloured regularly shaped beads with defined particle size distribution. Colour may vary from batch to batch and the colour intensity is not an indication of the product quality.

Particle size 300-500 µm > 95.0%

Enzyme activity NLT 2500 TBU units per g dry weight (Tributyirin hydrolysis)
NLT 10000 PLU units per g dry weight (Propyl laurate synthesis)

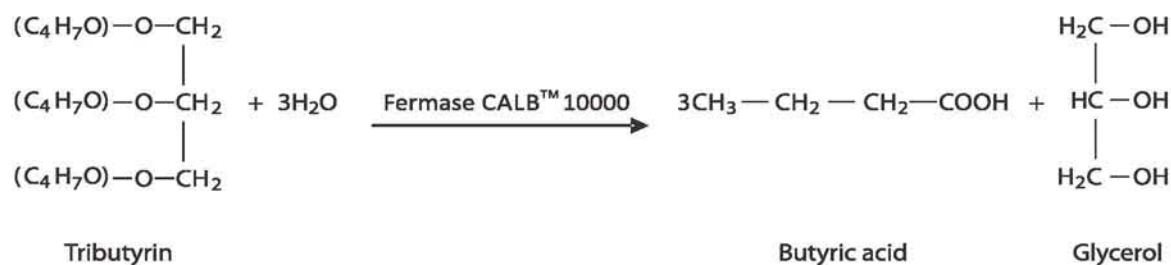
Dry weight NLT 60%

Unit definition *One TBU enzyme unit corresponds to amount of enzyme catalyzing the formation of 1 micromole of butyric acid at 40°C, pH 7.5 at 10% (v/v) Tributyrin concentration per minute per ml enzyme in the milieu of 100 mM sodium phosphate buffer.*

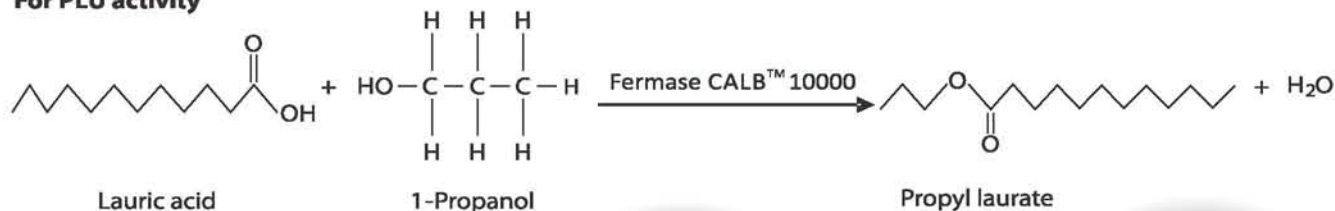
One PLU enzyme unit corresponds to synthesis of 1 micromole propyl laurate per minute per g of immobilized enzyme at 60°C from lauric acid and 1-propanol.

Reaction schematics

For TBU activity



For PLU activity

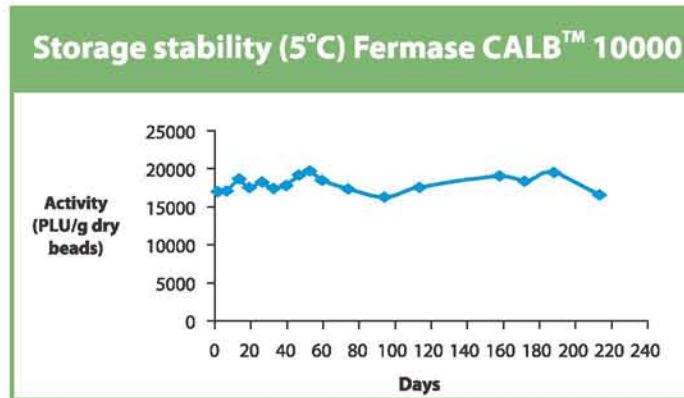
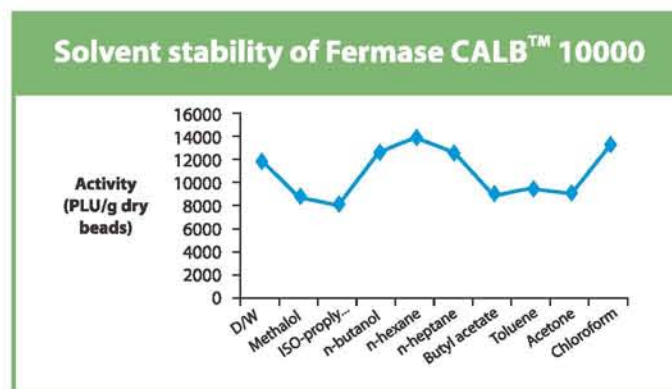
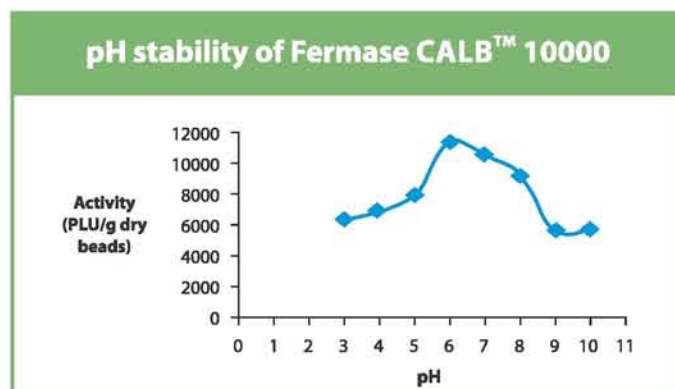




CANDIDA ANTARCTICA LIPASE B, RECOMBINANT

IMMOBILIZED
FERMASE CALB™ - 10000

Stability profile of Fermase CALB™ 10000



Advantages

- Higher activity
- Good stability
- Broad application

Storage & product stability

Cool and dry conditions are recommended for storage. The recommended temperature for storing is below 10°C. When stored under these conditions, the product will maintain its declared activity for at least 12 months.

Safety

Fermase CALB™ 10000 is very safe to handle, as it does not generate any aerosols. However, avoid raising dust. Avoid contact with skin and eyes. Take up the spilled dust by mechanical means. Avoid forming aerosols, wash contaminated clothing and ensure sufficient ventilation.

Material support data

- Technical data sheet
- Certificate of analysis
- Material safety data sheet
- Protocol for assay methods

Packing size

Minimum pack size : 1kg
Bulk pack size : 25kg

Manufactured By:
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