

## MEBEP TECH(HK) Co., Limited

Email: sales@mebep.com Website: www.mebep.com

Tel: +86-755-86134126 WhatsApp/Facebook/Twitter: +86-189-22896756

# Food-grade Lipase

**Product Number: FE17** 

## **Shipping and Storage**

- 1. This product is an active biological agent. During transportation and storage, it should be kept away from light, at low temperatures, dry, and ventilated.
- 2. This product is originally packaged in a cool and dry environment, with a shelf life of 12 months.

#### Component

Component	FE17
Food-grade Lipase	25kg/barrel

## **Description**

This product is a food grade enzyme preparation made by breeding Aspergillus niger, deep liquid fermentation, advanced extraction technology, ultrafiltration concentration, drying and refining. The enzyme has a wide temperature and pH range, and has high catalytic activity under 30-50°C and moderately alkaline pH conditions. Lipase may catalyze the hydrolysis of fats and oils, as well as the synthesis and transesterification of esters in non-aqueous phases.

#### Mechanism of action

Lipase, also known as triacylglyceroyl hydrolase, refers to a class of enzymes that catalyze the hydrolysis of triglycerides. It can specifically act on the ester bonds of oil esters, catalyze the hydrolysis of triglycerides, and release fatty acids, glycerol, and monoglycerides or diglycerides at different stages. Lipase is a type of enzyme with multiple catalytic abilities, possessing interfacial catalytic properties. It can catalyze ester hydrolysis or alcoholysis at the oil-water interface, and perform various organic synthesis reactions such as ester synthesis and ester exchange in the organic phase.

### **Operating conditions**

1. Effective temperature range: 30°C -50°C; Effective pH range: 4.0-12.0

2. Optimal temperature range: 35°C -45°C; Optimal pH range: 8.0-9.0

#### Appearance

Light yellow solid powder. Due to factors such as fermentation materials and cycles, there may be slight differences in color, but it will not affect the effectiveness of use.

#### Standard

Project	Indicator
Fineness (40 target pass rate),%	≥80
Dry weight loss,%	≤8.0



## MEBEP TECH(HK) Co., Limited

Email: sales@mebep.com Website: www.mebep.com

Tel: +86-755-86134126 WhatsApp/Facebook/Twitter: +86-189-22896756

Lead (Pb	o/(mg/kg)	≤5.0
Total arsenic (calculated as As)/(mg/kg)		≤3.0
Total colony count/(CFU/g)		≤50000
Coliform bacteria/(CFU/g)		≤30
Escherichia coli	(CFU/g)	< 10
	(MPN/g)	≤3.0
Salmonella (25g)		Not detected

### Usage

The general recommended dosage is 0.01-0.5kg enzyme preparation per ton of raw materials. However, due to differences in application fields, raw material composition, and process parameters among factories, the actual addition method and amount of this product should be determined through experiments.

#### Note

Enzyme preparations are proteins, and inhaling dust or suspended particles may cause allergic reactions in people. If exposed to certain enzymes for a long time, it may irritate the skin, eyes, and mucous membranes; Splashing and strong agitation may cause inhalable dust. It is recommended to wear protective clothing, gloves, and eye or face protection.