

LIPASE

PRODUCT CHARACTERISTICS

Declared Activity	120,000 u/g (Rival to Lipopan S BG)
Production Organism	Aspergillus niger
Physical Form	Powder
Color	Yellowish or white Color can vary from batch to batch. Color intensity is not an indication of enzyme activity.
Odour	Normal microbial fermentation odour
Production Method	Produced by submerged fermentation, separation and extraction technology.
Definition of Unit	1 unit of Lipase equals to the amount of enzyme, which hydrolyzes substance to get 1umol titratable fatty acid in 1 min. at 40°C and pH7.5.

EFFECT

- Improve the operational performance of dough;
- Improve the stability of dough; improve the inflation rapidity and quality of bread.
- Improve the appearance of bread and steam bread.

PRODUCT SPECIFICATION

The product complies with GB1886.174.

No.	ITEMS	Lower limit	Upper limit
1	Enzyme activity	120,000 u/g	
2	Total viable count/(CFU/g)		50000
3	Coliform Bacteria/(CFU/g)		30

4	Heavy metals/(mg/kg)		30
5	Lead/(mg/kg)		5.0
6	Arsenic/(mg/kg)		3.0
7	Cadmium/(mg/kg)		0.5
8	Mercury/(mg/kg)		0.5

REACTION PARAMETERS

CONDITION	RANGE
Activity Temperature	30°C-50°C
Activity pH	5.0-9.0

ALLERGEN LIST

Cereals containing gluten	Yes
Crustaceans	No
Egg	No
Fish	No
Lupin	No
Milk (including lactose)	No
Molluscs	No
Mustard	No
Nuts	No
Peanuts	No
Sesame	No
Soy	No
Sulphur dioxide/ sulphites	No

COMPOSITION

Corn or wheat starch	91%
Lipase	9%

DOSAGE

Recommended dosage is 0.1-2g/100kg(1-20 ppm)

Optimal dosage depends on the quality of flour and the processing

parameters;

Should be determined by baking trail;

It is better to increase the dosage gradually

PACKAGE AND STORAGE

- **Package** : 25kg/drum.
- **Best before** : When stored as recommended, the product is best used within 12 months from date of delivery.
- **Storage Conditions:** This product should be stored in a cool and dry place in sealed container, avoiding insolation, high temperature and damp. The product has been formulated for optimal stability. Extended storage or adverse conditions such as higher temperature or higher humidity may lead to a higher dosage requirement

- **Shelf life:** 12 months at 25°C, activity remain >90%. Increase dosage after shelf life

SAFE HANDLING PRECAUTIONS

Enzyme preparations are proteins that may induce sensitization and cause allergic type of symptoms in susceptible individuals. Prolonged contact may cause minor irritation for skin, eyes or nasal mucosa. Any direct contact with human body should be avoided. If irritation or allergic response for skin or eyes develops, please consult a doctor.