MEBEP TECH(HK) Co., Limited

Email: sales@mebep.com Website: www.mebep.com
Tel: +86-755-86134126 WhatsApp/Facebook/Twitter: +86-189-22896756

Hemicellulase

Product Number: FE55

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	FE55
Hemicellulase	25kg/bag

Description

Food grade hemicellulases are high-yield strains selected by mutagenesis of Aspergillus niger and refined through liquid deep fermentation. Hemicellulose is one of the main components of plant cell walls, a heterogeneous polymer composed of several different types of monosaccharides, including pentose and hexose sugars such as xylan, mannan, and galactose. The main component of this hemicellulase product is mannanase, which functions to degrade hemicellulose and eliminate anti nutritional properties. This enzyme can be widely used in industries such as food, feed, textile, papermaking, and petroleum.

Application

1. Mainly used for grain and vegetable processing, synergistic action with pectinase and cellulase can clarify fruit juice;
2. Used to process coffee beans, it can increase the extraction rate of coffee;
3. Used to process soybeans, it can improve the leaching rate of vegetable oil;
4. Adding this product to the feed can degrade the anti nutritional factors in the feed, increase the use of unconventional raw materials, reduce feed costs, and improve the production performance of livestock and poultry;
5. Can be used as a biological enzyme breaker to degrade thickening agents containing mannan such as guar gum, modified guar gum, xanthan gum, konjac gum, etc., reducing the viscosity of fracturing fluid and allowing it to flow back to the surface, thereby reducing the damage of fracturing fluid to the formation and environmental pollution;
6. It can degrade hemicellulose during the pre bleaching process of pulp, which is beneficial for the infiltration of chemical bleaching agents and lignin removal. It can increase the whiteness of pulp bleaching, reduce the kappa number, and reduce the amount of chemicals used in the pulp bleaching process.

Mechanism of action

Hemicellulases can randomly hydrolyze polysaccharides such as mannose, degrade hemicellulose, and produce mainly oligosaccharides such as mannose and a small amount of mannose.

Operating conditions

1. Effective temperature range: 30-70℃; Effective pH range: 3.0-6.5
2. Optimal temperature range: 40-55℃; Optimal pH range: 3.5-5.0

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

This product complies with the relevant provisions of GB 1886.174 "National Food Safety Standard - Food Additives - Enzyme Preparations for Food Industry". The specific product quality standards are as follows:

Project		Indicator
Fineness (40 target pass rate),%		≥80
Dry weight loss,%		≤8.0
Lead (Pb/(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 recommended dosage is 0.01-1.0kg of 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.

After opening the bag or bucket each time, if it is not used up, the bag opening should be tightly sealed or the bucket lid should be tightened to prevent the active ingredients from becoming inactive.