

PRODUCT SPECIFICATION

STABIZYM® PG500LA

Product Description

Protein-glutaminase (EC 3.5.1.44) is a protein-deamidating enzyme catalyzing the specific deamidation of glutamine to glutamic acid in plant-, animal- and microbial derived proteins. STABIZYM® PG500LA is an innovative liquid preparation, aseptically packaged and stable at room temperature.

Applications

STABIZYM® PG500LA can be used to improve the taste and organoleptic properties of protein-based food (e.g. plant based drinks, meat & dairy alternative products, bakery products, dairy products, etc.). It can be added to improve the protein functionality (e.g. solubility, foaming, emulsification, etc.) and sensory properties in the food applications. General use dosage is 0.05% to 0.2% by weight of the raw material powder for plant based drinks, 0.005% to 0.015 % by weight of the raw material milk for dairy products and 0.05% to 0.1% by weight of the flour for bakery products.



PG for plant based milk



PG for dairy products

Enzymatic and Physico-Chemical Properties

Description	Method	Specification
Color	Sensory analyses	Yellow to brown color
Enzymatic activity	Spectrophotometry	500 – 550 U/g
Density	25 °C/kg/L	1.10-1.25 kg/L
pH-value	pH Meter	5.9-6.4
Ingredients	Glycerol, water, protein-glutaminase	
Preservative	No preservative added	

Micro-biological and Heavy Metal Standards

Aerobic plate count	10 max (cfu/g)	Standard agar plate method
Coliform bacteria	10 max (cfu/g)	VRBA plate method
Salmonella	Negative in 25g	BGLB agar plate method
Yeasts and molds	10 max (cfu/g)	BGLB agar plate method
Staphylococcus aureus	Negative in 25g	BGLB agar plate method
Listeria monocytogenes	Negative in 25 g	BGLB agar plate method
Antibacterial activity	Negative	BGLB agar plate method
Total Arsenic	3.0 max (ppm)	as As
Total Heavy Metals	5.0 max (ppm)	as Pb

Shelf Life and Storage Condition

18 months from manufacturing date in the original unopened bottle, keep under room temperature, dark and dry conditions. Once opened the package, please use immediately. If aseptic conditions should be retained, please reseal it in a sterile environment or discard the rest; If not, please seal it and refrigerate for storage.

Packaging

STABIZYM® PG500LA preparation is packaged in 1 kg bottle or 3 kg BIB. Other packaging on request.

Packaging material is food grade and compliant to EU Regulations VO 1935/2004 and VO10/2011 and corresponding amendments.

List of Allergens

Allergen	Recipe included		Cross contamination	
	yes	no	yes	no
Gluten		✓		✓
Crustaceans and products thereof		✓		✓
Eggs and products thereof		✓		✓
Fish and products thereof		✓		✓
Peanuts and products thereof		✓		✓
Soybeans and products thereof		✓		✓
Milk and products thereof (including lactose)		✓		✓
Nuts		✓		✓
Celery and products thereof		✓		✓
Mustard and products thereof		✓		✓
Sesame seeds and products thereof		✓		✓
Sulphur dioxide and sulphites at concentrations of more than 10 mg/kg or 10 mg/L		✓		✓
Lupine and products thereof		✓		✓
Mollusc and products thereof		✓		✓

Quality

STABIZYM® PG500LA is manufactured following HACCP rules and compiled with ISO 9001 management quality system and Food Safety System Certification FSSC22000. The product complies with JECFA/FAO/WHO specifications for enzymes used in food processing. STABIZYM® PG500LA products are: certified Kosher and certified Halal, allergen-free.

GM status

STABIZYM® PG500LA is manufactured by a fermentation process of a particular non-genetically modified strain of *Chryseobacterium proteolyticum* which is not present in the final product. In addition, no ingredients derived from GMOs are used in the production process.

Contact

Stabizym (Shanghai) Biotech Co., Ltd.
C17 NO. 850, Lanfeng Rd, Fengxian Dist. Shanghai, China
+86 21 62848104 market@stabizym.com

Disclaimer:

This product specification describes the composition and properties of our product to the best of our knowledge. It replaces all previous versions and is valid without signature. Due to raw material variations deviations from this specification may occur within good manufacturing practice in order to standardize our product. Use and application as described isn't guaranteed and should be evaluated by the buyer, this includes infringement of third parties patent rights. The permissibility of our product may be limited to certain applications. It is the duty of the buyer to ensure that the use of our product and the placing on the market of the food made with it complies with local applicable legal requirements, taking also into consideration specific needs, e.g. those of children.