

Attenuzyme[®] Core

In this product the key enzyme activity is provided by glucoamylase that hydrolyzes (1,4)- and (1,6)-alpha-D-glucosidic linkages at the non-reducing ends of polysaccharides

PRODUCT CHARACTERISTICS/PROPERTIES

Component name	Glucoamylase (glucan 1,4-alpha-glucosidase)
Activity	1600 AGU/g
Side activities	The product contains controlled activity of Alpha-amylase
Color	Light to dark brown
Physical form	Liquid
Approximate density (g/ml)	1.11

Color can vary from batch to batch. Color intensity is not an indication of enzyme activity.

PRODUCT SPECIFICATION

	Lower Limit	Upper Limit	Unit
Amyloglucosidase unit AGU	1600		/g
pH at 25°C	3	5	
Total viable count	-	10000	/g
Molds	-	100	/g
Yeast	-	100	/g
Coliform bacteria	-	30	/g
E.coli	Not Detected		/25 g
Beer spoilers bacteria	-	100	/g
Salmonella	Not Detected		/25 g
Heavy metals		Max 30	mg/kg
Lead		Max 5	mg/kg
Arsenic		Max 3	mg/kg
Cadmium		Max 0.5	mg/kg
Mercury		Max 0.5	mg/kg

The enzyme analytical method is available from Novozymes Market or customer sales representative.

COMPOSITION

Preservatives	Potassium sorbate
	Sodium benzoate
Stabilizers	Sucrose/Glucose, D-

NUTRITIONAL VALUES

The product has a typical nutritional value of approximately 530 kJ/100 g enzyme product.

• Protein	29 g/100 g
• Carbohydrate	2 g/100 g
• Organic acid	0 g/100 g
• Ash	0 g/100 g
- Sodium	(0.1 g/100 g)
• Moisture	69 g/100 g

GM STATUS

This product is not a GMO.

Production organism Aspergillus niger

The enzyme product is manufactured by fermentation of a microorganism that is not present in the final product. The production organism is improved by means of modern biotechnology.

STORAGE CONDITION

Recommended storage: 0-10 °C (32-50 °F)

Packaging must be kept intact, dry, and away from sunlight. Please follow the recommendations and use the product before the best-before date to avoid the need for a higher dosage.

Best before: You will find the best-before date in the certificate of analysis or on the product label.

The product gives optimal performance when stored as recommended and used prior to the best-before date.

The product can be transported at ambient temperature. Following delivery, the product should be stored as recommended.

Valid from 2020-02-10

SAFETY AND HANDLING PRECAUTIONS

Enzymes are proteins. Inhalation of dust or aerosols may induce sensitization and may cause allergic reactions in sensitized individuals. Some enzymes may irritate the skin, eyes, and mucous membranes upon prolonged contact. See the Safety data sheet for further information regarding safe handling of the product and spills.

COMPLIANCE

The product complies with the recommended purity specifications for food-grade enzymes given by the Joint FAO/WHO Expert Committee on Food Additives (JECFA) and the Food Chemical Codex (FCC).

Kosher certificate is available from Novozymes Market or customer sales representative.

CERTIFICATIONS

Novozymes is a signatory to United Nations Global Compact, United Nations Convention on Biological Diversity and report on our sustainability performance through Global Reporting Initiative (GRI). See all our commitments under sustainability on www.novozymes.com.



FOOD SAFETY

Novozymes has carried out a hazard analysis and prepared an HACCP plan describing the critical control points (CCPs). The HACCP plan is supported by a comprehensive prerequisite program implemented in Novozymes' GMP practices. The product is produced according to Novozymes' HACCP plan, GMP practices, and additional requirements controlled by Novozymes' Quality Management System.



The product complies with FAO/WHO JECFA- and FCC-recommended purity requirements regarding mycotoxins.

PACKAGING

The product is available in different types of packaging. Please contact the sales representative for more information.

For more information, or for office addresses, visit www.novozymes.com