



DELTAZYM® BNP

Product Data Sheet

Date of issue: 29 July 2022

Bacterial neutral protease for the bioethanol industry

Description: DELTAZYM® BNP is a bacterial neutral protease produced from a selected strain of *Bacillus amyloliquefaciens*. DELTAZYM® BNP has been specially developed for the hydrolysis of proteins bound to starch in cereals. It can decrease the viscosity of the slurry for a faster starch liquefaction and increase peptides and free amino nitrogen content before the alcoholic fermentation.

Properties: Enzyme: protease IUBMB: 3.4.24.28
 Activity: >50 000 NP units/g Form: liquid
 Density: 1.10–1.20 g/ml Colour: brown

Colour and appearance may vary from batch to batch. Colour intensity or turbidity is not an indication of enzyme activity.

Application: DELTAZYM® BNP can be used in starch processing to hydrolyse proteins present in the starch slurry at neutral pH, to decrease viscosity and to improve filtration.

Conditions of use: DELTAZYM® BNP has shown to best perform when used under the following conditions:

Application	Dosage	Recommendation
Protein hydrolysis	30 - 120 g per ton of cereal	pH range: 5.5 - 7.5 Temperature range: up to 65 °C Optimum conditions: pH 3.0 - 5.5 and 40 - 50 °C

GM Status: The product and its constituent enzymes are not genetically modified. Enzyme proteins are produced by fermentation of classical microorganisms, which are removed and not present in the final product. Only agricultural raw materials of non-genetically modified (non-GM) origin are used for the fermentation process and in the final formulation.

Composition: DELTAZYM® BNP is stabilised with glycerol and preserved with potassium sorbate and sodium benzoate.

Packaging and storage: DELTAZYM® BNP is available in 25 kg polyethylene drums or IBCs. The product is best stored in the original and unopened packaging under refrigerated conditions (4–8 °C) in order to retain maximum activity during storage. Under optimum conditions shelf life is 24 months.

Safety and caution: Enzyme products need to be handled with care. Please consult the separately available Safety Data Sheet for further information.



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Compliance and legal: Our enzyme products are used as processing aids in the food manufacturing process and are thus free from any labelling provisions in the European Union. The product does not fall within the scope of EU regulations (EC) 1829/2003 and (EC) 1830/2003 on genetically modified food and feed.

The product is manufactured to comply with recommended purity specifications given by the Joint FAO/WHO Expert Committee on Food Additives (JECFA), and conforms with the recommended specifications of the Food Chemical Codex for food enzymes.

Purity criteria:	Total plate count	< 50 000 CFU per g	
	Yeasts & Moulds	< 1 000 CFU per g	
	Total Coliforms	< 30 CFU per g	
	Salmonella	absent in 25 g	
	Escherichia coli	absent in 25 g	
	Heavy Metals (as Pb)		< 30 ppm
	Lead	< 5 ppm	
	Arsenic	< 3 ppm	
	Cadmium	< 0.5 ppm	
	Mercury	< 0.5 ppm	
Special diet information:	Kosher:	Certified	
	Halal:	Certified	
	Vegan/Vegetarian:	enzyme product or any constituents are not of animal origin	

Certification: WeissBioTech GmbH has a certified quality management system according to ISO 9001:2015 and a certified Food Safety Management System according to FSSC 22000 incl. HACCP, which are reviewed in regular audits.

Made by WeissBioTech GmbH, Germany

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