



# DELTAZYM® GA MAX L3.6

## Product Data Sheet

Date of issue: 29 July 2022

### Active Glucoamylase for use in starch processing

**Description:** DELTAZYM® GA MAX L3.6 is obtained from *Aspergillus niger* and is a saccharification enzyme producing glucose from hydrolyzed starch. DELTAZYM® GA MAX L3.6 hydrolyzes the 1,4-linkages in starch and also the 1,6- $\alpha$ -linkages. DELTAZYM® GA MAX L3.6 also contains some acid  $\alpha$ -amylase and protease activities and is specially developed for processing sub-optimally standardised raw materials.

**Properties:** Enzyme: glucoamylase IUBMB: 3.2.1.3  
 Activity: >360 AMG units/g Form: liquid  
 Density: 1.10–1.25 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® GA MAX L3.6 is specially developed for processing sub-optimally standardised raw materials and is added during the starch saccharification stage, or during Simultaneous Saccharification and alcoholic Fermentation (SSF).

**Conditions of use:** DELTAZYM® GA MAX L3.6 has shown to best perform when used under the following conditions:

Application	Dosage	Recommendation
Starch saccharification or SSF	500 - 600 g per ton of cereal	Application at pH 4.2 - 5.5 and temperature 30–60 °C Optimum conditions: pH 4.5 - 5.2 and 40 - 52 °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® GA MAX L3.6 is stabilised with glycerol and preserved with potassium sorbate and sodium benzoate.

**Packaging and storage:** DELTAZYM® GA MAX L3.6 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.

<b>Purity criteria:</b>	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
<b>Special diet information:</b>	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

To the best of our knowledge, the information contained herein is accurate and complete. However, nothing herein contained shall be construed to imply any warranty or guarantee.

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