



# STARCHZYME-G Specialty Fungal Amyloglucosidase

# **DESCRIPTION**

Starchzyme G is amyloglucosidase enzyme preparation produced from a selected strain of *Aspergillus species*. The enzyme will randomly hydrolyze 1, 4and1. 6-alpha linkages in liquefied starch into glucose units in a stepwise manner from the non-reducing end of the molecule. Starchzyme-G is high performance starch saccharification enzyme.

Starchzyme G is a amyloglucosidase starch saccharification enzyme to be used in various types of starch processing industries. In starch industry, Starchzyme G is used for saccharification of dextrins in production of dextrose, fructose syrup and glucose syrup of various specifications.

Starchzyme G is free from trandsglucosidase activity and therefore produces quantitative yields of glucose from liquefied starch.

#### PRODUCT SPECIFICATION: Liquid

Parameters	Operational range	Optimal range
Temperature	40°C to 65°C	45°C to 65°C
pH	4.0 to 5.0	4 to 4.5
Form & appearance	Liquid Brown Colour	
Enzyme type	Amyloglucosidase	
Enzyme activity	120000 DU	
Microbial source	Aspergillus species	

## **PACKGING:**

Starchzyme-G available in 25 kilogram HDPE jerry can for liquid & HDPE drum for powder products. Special packaging is also available on request.

#### SAFETY

The product is produced under hygienic condition and is subject to stringent quality control.

#### **Toxicology**

The product produced by GRAS microorganism and is classified as non toxic.

# **Biodegradability**

Product is Biodegradable.

### Handling precaution

Enzymes are proteins and 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.

Liquid enzyme products may create inhalable aerosols if splashed or vigorously stirred. Spilled product material should therefore be flushed away with water.

#### STORAGE:

Enzyme products should be stored in a cool dry place. When stored below 35°C products will maintain its declared activity for at least 24 months. The enzyme preparation should not be left in direct sunlight for extended periods. Liquid preparation should not be frozen.

#### **REGULATORY INFORMATION:**

**EEC Classification** 

In concentration form, the liquid enzymes products are classified as "sensitizers by inhalation" under the terms of EEC directive 88/379.

### TECHNICAL DATASHEET: Usage Guideline:

There are many factors that influence liquefaction with Starchzyme G, such as:		
Type of raw material	Dry substance (DS)	
Type of process and equipment	Temperature and pH of the process	
Process time		
Product	Dosage[%]	
Starchzyme-G for starch industry	0.5-0.7 kg/Metric tonne of starch substrate	
	(Dry Substrate) with holding time of 40-96	
	hours	

Technical datasheet given with each product are only given as usage guidelines, but tests should be carried out under local conditions to fix the optimum dosage for the machine type and condition.

#### **TECHNICAL SERVICE:**

Aum Enzymes technical service laboratory shall be pleased to provide more information covering specific applications for all products or discuss any practical problem which many occur in the industry.

### **AUM ENZYMES**

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