



Aum Enzymes
India's #1 Speciality Enzyme Products

STARCHZYME-AH

Heat stable specialty alpha amylase

BENEFITS

Unique feature to work at very high temperature and low pH
Unique feature to work with low calcium or without calcium, under most condition
Eco-friendly and biodegradable
High activity, thus economical in use and storage
Significant reduces overall process
Reduces ion-exchange cost
Reduces color formation and refining needs
Reduces chemical consumption

DESCRIPTION

Starchzyme AH is a heat stable bacterial alpha amylase enzyme preparation produced from thermophilic strain of *Bacillus species*. The enzyme will randomly hydrolyzed 1, 4 alpha-D – glucosidic linkages in gelatinized starch into soluble dextrin's and oligosaccharides. Starchzyme AH is high performance starch liquefaction enzyme. Starchzyme AH is heat stable bacterial alpha-amylase high temperature starch liquefaction enzyme to be used in various starch processing industries.

In starch industry, Starchzyme AH is used for continuous liquefaction of starch in steam jet cooker or similar equipments operating at temperatures up to 105°C-110°C.

Due to its broad pH tolerance and low calcium requirement, pH adjustments and calcium addition can often omitted. This significantly reduces the ion-exchange load in the starch processing and formation of calcium oxalate scaling in distillation column.

PRODUCT SPECIFICATION: Liquid

Parameters	Operational range	Optimal range
Temperature	75°C to 110°C	85°C to 105°C
pH	5.0 to 7.5	5.5 to 6.5
Form & appearance	Liquid	
Enzyme activity	120000 IU/ML	
Microbial source	<i>Bacillus species</i>	

PACKGING:

Starchzyme-AH available in 25 kilogram HDPE jerry can. 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 AH, 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-AH for starch industry	0.4-0.8 kg/Metric tonne of starch substrate (Dry Substrate)
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

30, Bhakti Nagar, Nr. Jalaram Mandir, BORSAD-388 540.

Dist. Anand. (Gujarat) India.

Mobile: +91-9898383455

E-mail: info@aumenzymes.com, aumenzymes@gmail.com.

Website: www.aumenzymes.com