



*Aum Enzymes*  
India's #1 Speciality Enzyme Products

## Deepzyme-A Fungal alpha amylase

### BENEFITS

Significant effect of specialty amylase on baked goods  
Improved dough handling  
Improved bread volume  
Improved crumb colour and texture  
Enhance the reactions for browning of the crust and baked flavors  
Also, improvers for the production of Soft buns  
Ecofriendly and biodegradable

### DISCRIPTION

Deepzyme A is a fungal alpha amylase enzyme preparation produced by a selected strain of *Aspergillus species*. The enzyme will hydrolyse 1,4 alpha D glucosidic bonds in gelatinized starch to small dextrans, thus allowing yeast to work continuously during fermentation, proofing and the early stage of baking. This result in improved bread volume and crumb texture. In addition small oligosaccharides and sugars such as glucose and maltose produced by these enzymes enhance the reactions for the browning of the crust and baked flavour.

In baking industry, Deepzyme A is used for supplementation of the alpha amylase in flour for yeast leavened doughs in order to increase the formation of fermentable sugars.

**The product colour may vary from batch to batch and the colour intensity does not indicate the product strength [Enzyme activity].**

### PRODUCT SPECIFICATION

| Parameters        | Operational range                                     | Optimal range |
|-------------------|---|---------------|
| Temperature       | 40°C to 60°C  | 45°C to 55°C  |
| pH                | 4.0 to 7.0  | 4.5 to 6.5    |
| Form & appearance | Free flowing Powder , Light yellow to off white color |               |
| Enzyme type       | Alpha amylase   |               |
| Microbial source  | <i>Aspergillus oryzae</i>                             |               |

### PAKAGING:

Enzymes products are available in 25 Kilogram HDPE fiber 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 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 may 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](mailto:info@aumenzymes.com), [aumenzymes@gmail.com](mailto:aumenzymes@gmail.com).

Website: [www.aumenzymes.com](http://www.aumenzymes.com)