



# FEEDZYME-PHY Fungal Phytase

#### **BENEFITS**

# Degrades phytate and resultantly increases the availability of phosphorus and other nutritional components of the feed

#Improves phosphorus utilization in feeds for poultry, pigs and other monogastric animals

# Improves growth and feed conversion ratio (FCR)

# Improves egg size and quality in layers

# Reduces the phosphorus output resulting in better quality manure

# Eco-friendly and bio-degradable

#### **DESCRIPTION**

Feedzyme-PHY is a phytase enzyme produced by SSF techniques from a selected strain of *Aspergillus species*. The enzyme will catalyze the hydrolysis of phytic acid (phytates) into free phosphate groups which can be used as a phosphorus source by animals. Feedzyme-PHY also has side enzymes like amylase and protease, which will break down feed ingredients in to simple compounds. Feedzyme-PHY is high-performance phytates degrading animal feed enzyme.

Feedzyme-PHY is a phytase enzyme to be used in feed industry. It is specially designed to improve phosphorus utilization in feeds for poultry, pigs and other monogastric animals. Feedzyme-PHY degrades phytates and resultantly increases the availability of phosphorus and other nutritional components of the feed. More than two thirds of the phosphorus present in typical feedstuffs like cereals, oil seeds, etc. is bound in the form of phytate phosphorus. In addition bivalent cat ions such as calcium magnesium iron and zinc as well as proteins and amino acids are also bound to phytate.

Monogastric animals, such as poultry and pigs cannot digest the phosphorus contained in these phytate structures due to the lack of necessary enzymes to effectively break down the phytate, and free this phosphorus. The addition of a phytase enzyme to feed free up the phosphorus contained in feedstuffs by degrading phytate and also releases other minerals such as calcium, magnesium, iron and zinc, as well as proteins.

Feedzyme-PHY considerably increase the digestibility and utilization of the total phosphorus contained in feedstuff and hence less supplementation of the feed with mineral phosphorous is necessary to meet the animal's phosphorous requirement. The addition of inorganic phosphorous to the feed can be reduced without adversely affecting the performance or skeletal mineralization of the animals.

With the use of Feedzyme-PHY the phosphorus content of manure can be reduced by 30-40 %. This is accomplished by increased utilization of the phosphorus in feed stuffs and by the reduction of dietary inorganic phosphorus supplementation.

## PRODUCT SPECIFICATION TYPE

Form & appearance	Powder	Free flowing , light brown color
Parameters	Optimal range	Operational Range
Temperature	30°C-75°C	25°C -90°C
pH	3.0-7.0	2.5 - 8.0
Microbial source	Aspergillus niger GRAS m.orgs.	
Enzyme type & activity	Phytase 2500 FTU/gram	

#### **APPLICATION & DOSAGE**

There are many factors that influence usage of Feedzyme-PHY, such as, type of species, feed composition, ingredient and nutrient specification of feed. For best result of Feedzyme-PHY, it is mix thoroughly in the feed.

Feed preparation for			
	Recommended dosage Gram / tonne feed		
	Feedzyme PHY 2500 FTU	Amount of Substitute dicalcium phosphate	
Broilers	120-150g	6.2~8.5 Kg	
Laying hen	100-150g	8.5~9.5 Kg	
Meaty chicken	200g	6.2~8.5 Kg	
swine	200g	6.2~8.5 Kg	
Laying duck	200g	9.0~12 Kg	
Meaty duck	200g	6.2~8.5 Kg	
Pig	100g	5~7 Kg	

#### **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.

# **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.

# STORAGE:

Enzyme products should be stored in a cool dry place. When stored below  $35^{\circ}$ C products will maintain its declared activity for at least 24 months.

#### PACKAGING:

Enzyme products are available in 25 Kilogram HDPE fiber drum. Special packaging is also available on request.

## **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. 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 dosages for animal species.

# **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: <a href="www.aumenzymes.com">www.aumenzymes.com</a>