



# Smizyme NT

## Product Data Sheet



### Description

Smizyme NT is an enhanced 6-phytase derived from *Escherichia coli* species bacterium and is expressed in a *Pichia Pastoris* yeast. Smizyme was successfully developed for maximum phytate destruction by Beijing Smile and experts from the Biotechnology Research Institute of Chinese Academy of Agricultural Science (CAAS).

### Application

Smizyme NT is a phytase specifically developed to degrade phytate and release phosphorus, calcium, other mineral ions, energy and amino acids in pig and poultry diets.

### Processing Stability

Smizyme NT is intended for use in unprocessed (mash) feed.

### Specifications

Appearance: Beige, free-flowing granulate, powder or meal.

Granulate: 0.25 - 0.60 mm

Powder: 0.05 - 0.25 mm

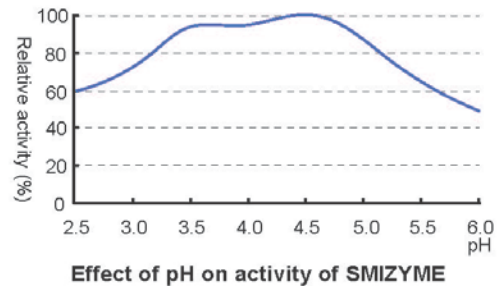
Meal: 0.40 - 0.85 mm

Activity min: 1,000/2,500/5,000/10,000/25,000/50,000/100,000 FTU/g

One phytase unit is the amount of enzyme that liberates inorganic phosphate at 1 u mole per minute.

### Physical Characteristics

Smizyme has improved pH specificity and is stable in an acidic environment under pH conditions of the upper digestive system for the pig stomach and poultry crop, activity across a pH range of 2.5 - 6.0



Effect of pH on activity of SMIZYME

### Dosage Range

2.5 - 2500 g per metric ton (250 - 2500 FTU/kg) of complete feed, included direct or via a premix.

### Stability and Storage

Storage stable for 12 months below 77°F (25 °C) in unopened package. Store in a cool, dry, ventilated place.

### Packaging

Smizyme NT is available in 50 lb and/or 20 kg bags.

### Safety

This product is safe when used as instructed. Inhalation may cause allergic respiratory reaction. Product should be used in well-ventilated areas and avoid dust formation. It is recommended to use protective glasses, respiratory mask and gloves during handling. For full safety information refer to the Safety Data Sheet.

### Technical Service

Information covering specific applications of this product is available. Origination, Inc. will work with you to enhance processes and solve problems. Let us know what you need and we will assist you: 1-800-625-6079.