

## Native *Bacillus subtilis* Xylanase Enzyme (Food Grade)

Cat. No. NATE-0734

Lot. No. (See product label)

### Introduction

#### Description

Xylanase is the name given to a class of enzymes which degrade the linear polysaccharide beta-1,4-xylan into xylose, thus breaking down hemicellulose, one of the major components of plant cell walls. As such, it plays a major role in micro-organisms thriving on plant sources for the degradation of plant matter into usable nutrients. Xylanases are produced by fungi, bacteria, yeast, marine algae, protozoans, snails, crustaceans, insect, seeds, etc., (mammals do not produce xylanases).

#### Applications

1) In the bread-making process, the elastic of the dough with appropriate xylanase is enhanced significantly and easy to operate; the time of dough formation and dough stabilization is shorten significantly; the proofing dough volume is increased significantly; the skin color is moderate and hardness decreased after baking; the texture is white and delicate; the structure is fine and smooth; the stoma is uniform and the bread is soft and chewy. 2) In the storage of bread, the appropriate xylanase can retrad bread staling, improve the water holding capacity of the bread and optimize the gluten network, thereby, preventing water loss and re-allocate, stabilize the organizational structure of the bread.

#### Synonyms

EC 3.2.1.8; endo-(1→4)-β-xylan 4-xylanohydrolase; endo-1,4-xylanase; xylanase; β-1,4-xylanase; endo-1,4-xylanase; endo-β-1,4-xylanase; endo-1,4-β-D-xylanase; 1,4-β-xylan xylanohydrolase; β-xylanase; β-1,4-xylan xylanohydrolase; endo-1,4-β-xylanase; β-D-xylanase; endo-1,4-β-xylanase

### Product Information

#### Source

*Bacillus subtilis*

#### Appearance

Powder with good fluidity

#### EC Number

EC 3.2.1.8

#### CAS No.

9025-57-4

#### Activity

> 20,000u/g

#### Optimum pH

5.0-7.0

#### Optimum temperature

50-80°C

#### Unit Definition

One unit of Xylanase equals to the amount of enzyme, which hydrolyzes xylan to get 1 μg Of reducing sugar (in xylose) in 1 min. at 50°C and pH5.0.

### Storage and Shipping Information

#### Storage

Should be stored in a dry and cool place, avoiding high temperature.

#### Stability

12 months in a cool and dry place in original package, enzymatic activity remains > 90%. Increase dosage after shelf life. 18 months in a dry place at 5~15°C.