

## Keratinase (food grade)

Cat. No. CEFX-267

Lot. No. (See product label)

### Introduction

**Description** Keratinase is produced by the fermentation of *Aspergillus niger*. It is a highly specific protease that can effectively hydrolyze the peptide bonds within keratin molecules. Its enzymatic activity is typically most pronounced within specific temperature and pH ranges, generally showing optimal activity under neutral to alkaline conditions (pH 7-9) and in warm environments (30-50°C).

**Applications** 1. Food Processing: Nutritional Enhancement: Keratinase can convert animal by-products (such as feather meal and hoof powder) into high-value protein hydrolysates, which can be used as food additives to increase food's protein content and nutritional value. Food Modification: By treating certain foods with keratinase, the texture and mouthfeel of the products can be improved. For instance, using keratinase in meat processing can make the products more tender and smooth. 2. Feed Industry: Feed Improvement: Keratinase can be used to process poultry feathers and other by-products, converting them into high-protein feed ingredients, thereby increasing the protein utilization rate of the feed and reducing feed costs. Nutritional Additive: The keratin protein hydrolysates produced are rich in various amino acids and can be used as nutritional additives in feed, enhancing the overall nutritional value of the feed. 3. Environmental Protection: Waste Treatment: The application of keratinase helps reduce agricultural and livestock by-product waste. Through biological degradation, it effectively handles hard-to-degrade keratin waste, thereby reducing environmental pollution.

### Product Information

**Source** *Aspergillus niger*

**Appearance** Light yellow powder

**Form** Powder

**EC Number** EC 3.4.21

**Specific Activity** 100,000 U/g

### Usage and Packaging

**Package** 25KG/Drum with double plastic bag of foodstuff inside

### Storage and Shipping Information

**Storage** 1 year under well storage situation and stored away from direct sun light