

Alkaline Protease L3000

Cat. No. APGZ-0001

Lot. No. (See product label)

Introduction

Description

Alkaline Protease L3000 is a light yellow, clear liquid protein hydrolase produced by *Bacillus subtilis* through submerged fermentation, extraction, and purification. It is a serine-type endo-alkaline protease.

Applications

Laundry detergent formulations Removal of protein-based stains from clothing

Product Information

Species

Bacillus subtilis

Source

Bacillus subtilis; produced through submerged fermentation, extraction, and purification.

Appearance

Light yellow, clear liquid

Form

Liquid formulation

Activity

300,000 U/mL

pH Stability

Application pH range: 6.0–11. Enzyme activity decreases outside this range.

Function

Hydrolyzes proteins first into soluble polypeptides and then further into amino acids. The resulting small soluble or readily dispersible substances help reduce adsorbed protein stains in washing liquor.

Substrates

Proteins

Advantages

Effectively removes protein stains from clothing and can reduce the required amounts of caustic soda and sodium tripolyphosphate, thereby lowering associated environmental hazards. Mild washing conditions help extend fabric service life.

Usage

Recommended operating conditions: pH 6.0–11 and 25–60 °C. Enzyme activity decreases beyond this range. Before use, proportion appropriately with detergent. Recommended addition: 0.3%–1.5% of the detergent, adjusted as appropriate for the washing purpose.

Usage and Packaging

Package

25 kg/plastic drum

Storage and Shipping Information

Storage

Store in a cool, dry place away from direct sunlight. Shelf life: 12 months when stored under dry conditions at 5–25 °C.