

Blend of polygalacturonase and pectate lyase

Cat. No. EXTZ-919

Lot. No. (See product label)

Introduction

Description

This product is a liquid enzyme blend of polygalacturonase and pectate lyase with supplementary hemicellulase and arabinanase side activities, produced by controlled fermentation. Polygalacturonase (EC 3.2.1.15) cleaves the alpha-1,4-glycosidic bonds of demethylated pectin by hydrolysis, while pectate lyase (EC 4.2.2.2) cleaves the pectin backbone by trans-elimination, generating unsaturated oligogalacturonates. Acting together, the two activities rapidly depolymerize high-methoxyl and low-methoxyl pectins from diverse fruit and vegetable raw materials. The blend is formulated for mash treatment and depectinization in juice and concentrate production, where it increases juice yield and color extraction, reduces viscosity, and improves clarification and light transmittance. It shows an optimum pH of 3.0-4.5 and a working temperature of 50-55°C, remaining effective at temperatures up to 60°C, which shortens processing times.

Applications

Food, Industrial

Product Information

Source

Microbial fermentation

Appearance

Brown liquid

Form

Liquid

Activity

10,000 PECTU/g

Isoelectric point

Stable in the pH range 3.0-4.5

Optimum pH

3.0-4.5

Thermal stability

Active and effective at temperatures up to 60°C

Optimum temperature

50-55°C

Storage and Shipping Information

Storage

Store in a dry, closed container under cool conditions