

# Pectinase 947L

## P947L

### Features/Benefits

- Ideal for the peeling of citrus fruit
- Insoluble and soluble depectinisation
- Excellent low pH stability
- Improved yields in juice extraction
- Ideal for Guava processing

**Pectinase 947L** contains a unique blend of pectinases with a high Polygalacturonase (PG) to Pectin Lyase (PL) ratio and a moderate maceration index specifically designed for the peeling of citrus fruit. The mixture of carbohydrases in Pectinase 947L breaks down the albedo by digesting soluble and insoluble pectins, cellulose and arabinoxylan, causing the fruit segments to separate from the skins. Enzymatic treatment provides a gentler and less energy intensive process than mechanical peeling. It is less likely to damage the fruit resulting in segments with increased visual appeal and lower losses. Pectinase 947L is ideal for use in the production of florida cocktail and other fresh citrus salads.

### Specification

Activity	900 U/g Cellulase 900 U/g PG (Endo-Polygalacturonase)
Biological Source	<i>Aspergillus sp. Trichoderma sp.</i>
Form	Brown liquid
Optimum pH Range	3.0 – 5.5
Optimum Temperature Range	35 - 55°C

### Application & Dose

**Pectinase 947L** is ideal for citrus fruit peeling. The fruit should first be scored (cut) to allow penetration of the enzyme to the albedo. The scored fruit should be placed in an enzyme vacuum bath containing 1 - 2 % Pectinase 947L. The skins will separate after 3-6 minutes depending on the temperature. A temperature of 35 - 45°C is ideal. Pectinase 947L can also be used for fruit processing. As a guide juice extraction is carried out at a dose rate of 50 - 100 ml / tonne in the crusher/ pulper stage, juice clarification is carried out at a dose rate of 10 - 20 ml / tonne at the holding tank stage. Reactions to be carried out for 1 - 2 hours in a stirred vessel. Exposure to a temperature of 90°C for 20 minutes will inactivate the product. In common with other pectinases, Pectinase 947L activity is reduced by bentonite and it is recommended that the enzyme action is allowed to complete before the bentonite treatment is performed.

### Health & Safety

Always read the Material Safety Datasheet (MSDS) before use and retain. If you are in any doubt about recommended product handling and safety, please contact Biocatalysts before use. Generally, when using enzymes avoid contact with the skin and eyes and do not breathe dusts or aerosols containing them. MSDSs are available in other languages. Please contact Customer Services.

### Storage

Liquids: Activity will remain within specification for at least 9 months from the date of manufacture when stored 2 - 8°C.

### Allergens

Refer to allergen statement.

### Food Status

Material complies with the JECFA/FAO/WHO and FCC recommended specifications for enzymes used in food processing.

### GM Status

This product has been manufactured using a fermentation process of a microbial organism that has not been altered using modern biotechnology. This product does therefore not require labelling as GMO on food labels.

### Quality & Food Safety

Biocatalysts operates a preventative risk-based Food Safety System that ensures the environment and processes are designed to produce safe products every time. FSSC22000 and FSMA compliant.

Compliance - The Company's integrated management system encompasses Quality, Food Safety, Health and Safety and GMP.

Certificates are available on request from the Customer Services Department.

### Availability

Liquids: standard 25kg net plastic jerry cans. Non-standard quantities are also available for some products, please enquire.