



# Maurizym Pectinase 4X

## Product information

Following trials in the heart of **New Zealand's Marlborough** region using Sauvignon Blanc juice, in collaboration with the highly regarded **Bragato Research Institute**, we have demonstrated the ability of concentrated **Maurizym Pectinase 4X** to enable improved juice extraction times and yield.

This **concentrated Pectinase** assists winemakers to either reduce their dosage rate with the same juice processing times, or retain the same dosage rate and reduce the time of juice processing by **up to 30%**.

Other added **benefits** to winemakers include reducing the amount of water being shipped unnecessarily, by reducing cold storage requirements for enzymes at the winery, and allows wineries to become more flexible during vintage, by adjusting the **Pectinase 4X** addition rates to the speed of grape intake.

### TYPE

A stable and tolerant liquid pectinase.

### APPLICATIONS AND KEY FEATURES

**Maurizym Pectinase 4X** is a concentrated multi-purpose pectinase for white and red grape juice to increase yield.

- It also has **clarification** and **flotation** capabilities.
- This **enzyme** does not contain significant cellulase activities that could extract bitter components.
- **Maurizym Pectinase 4X** also has high **thermal stability** for thermovinification processes such as thermoflash, thus allowing it to work longer in such processes.

### Trial Results - Pectic Enzyme Trial

Treatment	Rate (ml/L)	1 Hour	2 Hour	3 Hour	4 Hour	5 Hour	6 Hour	7 Hour	8 Hour
Control	n/a	X	X	X	X	X	X	X	X
Enzyme 1	0.03	X	X	X	X	X	X	X	X
Enzyme 2	0.02	X	X	X	X	X	X	✓	✓
<b>Pectinase 4X</b>	0.0075	X	X	X	X	✓	✓	✓	✓

X - Fail – pectin still present

✓ - Pass – Pectin was hydrolysed

### DOSAGE RATES

Dosage varies based on grape variety, contact time and temperature.

#### White & Red maceration:

- Chardonnay: 0.25-0.5 ml/hL (10-20 ml/1000 gallons) for 30-60 minutes at ambient temperature.
- Higher viscosity juices (Sauvignon Blanc, Semillon, Merlot, Shiraz): 0.5-0.75 ml/hL (20-30 ml/1000 gallons) in the same conditions.
- For high viscosity juices such as Muscat, use Maurizym White XP (*Maurizym Pectinase 4X does not contain significant colour degrading activities*).

#### White depectinisation/clarification/flotation:

- Concentrated Pectinase rapidly removes pectin in any juice.
- Doses: 0.5 ml/hL (20 ml/1000 gallons) for a pectin negative test after 60 minutes at 15-21°C (60-70°F). Increase to 1 ml/hL (40 ml/1000 gallons) for cloudier juices with higher pectin content.

#### High temperature maceration:

- Effective up to 65°C (150°F), should be added at the crusher due to its temperature tolerance.

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### INSTRUCTIONS FOR USE

- Add to grapes at the crusher or in the press.
- Dilute into water (1:10) to optimal distribution of the enzyme into crushed grapes.

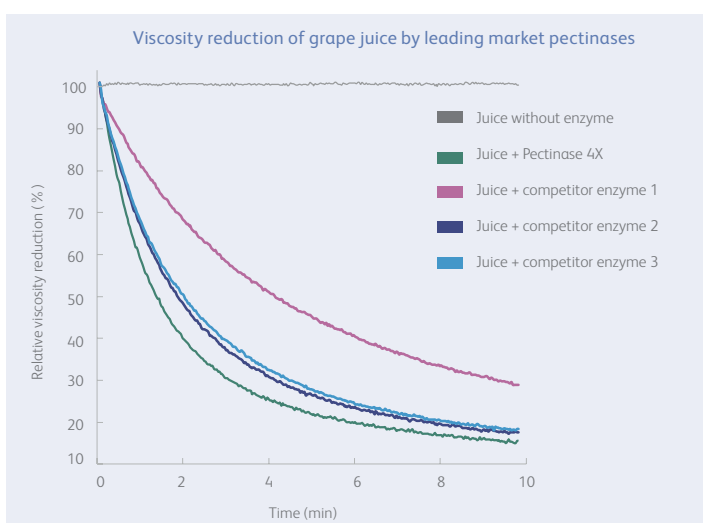


Figure 1. Viscosity reduction of grape juice by the same amount of commercial pectinases at 30°C pH 3.7 during 10 min.

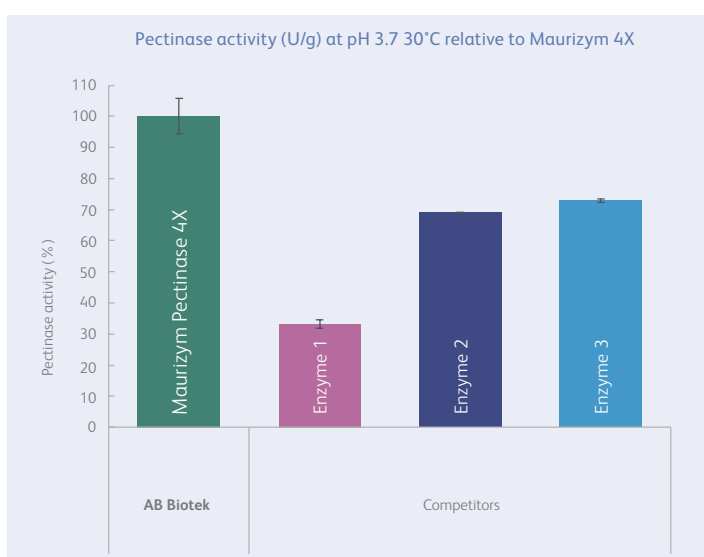


Figure 2. Pectinase activity (U/g) derived from viscosity reduction by commercial pectinases at 30°C pH 3.7 expressed as % activity relative to Maurizym 4X.

### FORMULATION

Maurizym Pectinase 4X contains concentrated Pectinase and Glycerin.

### STORAGE AND SHELF-LIFE

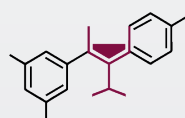
This enzyme should be stored at 10°C (<50°F) and will retain high activity for two years from the date of manufacture.

### PACKAGING

Maurizym Pectinase 4X is a liquid enzyme available 1000 L IBC and 20 kg container.

### PACKAGING

For further information and technical advice please contact your local distributor at:  
[wineinfo@abbiotek.com](mailto:wineinfo@abbiotek.com)



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RESEARCH  
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Product approved for winemaking in accordance with Reg. (EC) N. 606/2009 International Code of Oenological Practices.