



ENDOZYM[®] Rouge HR

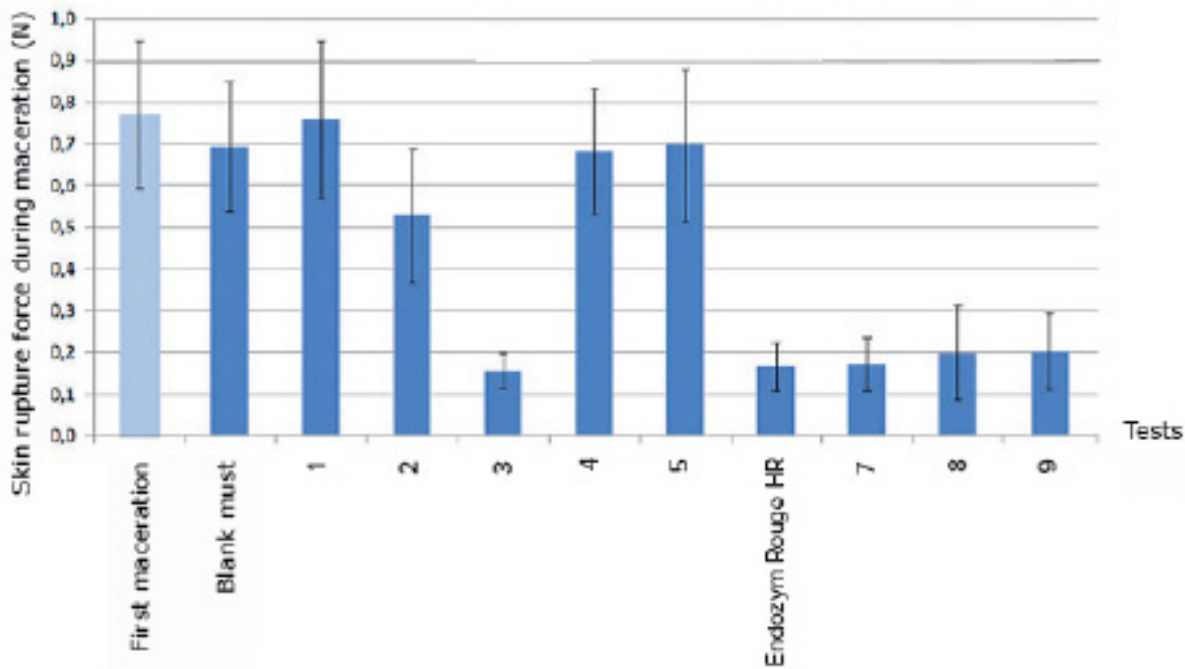
Pectolytic enzyme specific for very ripe grapes



→ TECHNICAL DESCRIPTION

More and more often, oenologists have to work with very ripe red grapes due to climate change in recent years, which has modified the maturation times for many varieties. Phenolic maturity normally occurs after physiological maturity and hence there is a change in the extraction logic of anthocyanins, tannins and juice during maceration.

In collaboration with the University of Turin, AEB has developed an enzyme that is ideal for very ripe and dried grapes: **Endozym Rouge HR**, which improves extraction and enhances the formation of a thicker-than-normal must, featuring a high degree of sugar. The dehydration of the berry has showed a different colour extraction logic, which differs greatly from traditional vinification, and hence specific enzymes.

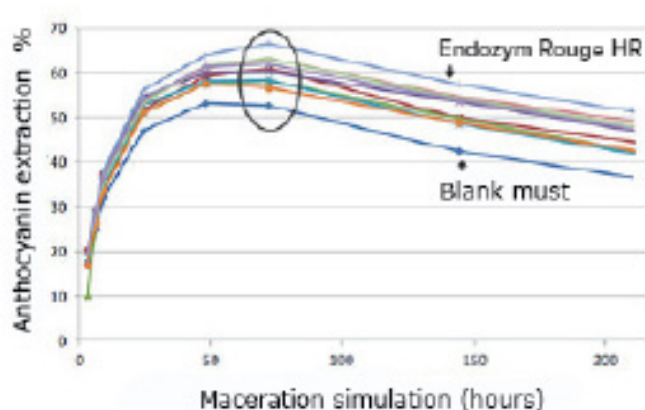


The tests performed on the point of rupture of the skin showed how normal enzymes have no effect on these grapes, while **Endozym Rouge HR** was found to be extremely effective, thus making possible to reduce the number of pumpovers and maceration time. It was also noted how the peak of colour occurring after only 72 hours was 20% higher than that with other preparations and the blank must, with 14% increment in colour at the end of fermentation, compared to normal enzymes available on the market.





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The possibility of controlling pumpovers and delestages makes it possible to improve the tannin picture of silkier and smooth wines, while maintaining a definitely higher level of anthocyanidins and polyphenols.

→ COMPOSITION AND TECHNICAL CHARACTERISTICS

Enzymatic activity	Activity/g
PL (U/g)	4,700
PE (U/g)	155
PG (U/g)	10,178
Total UP (U/g)	15,000

The value is approximate and is not a specification.

PL (Pectin lyase): degrades esterified/non-esterified pectins. It is a necessary activity of AEB enzymes, given that it enables very quick clarification.

PE (Pectinesterase): assists PG in the degradation of the pectin.

PG (Polygalacturonase): only degrades non-esterified pectins. Represents enzyme activity which, in combination with PL activity, is crucial for the level of clearness in the musts and filtering ability of the wine. The combination of PL and PG activities makes it possible to obtain high yield from the first pressing very quickly.

The total measure of enzyme activity, which is indicated for each preparation, can be expressed as: **Total UP** (U/g), which is the measure of enzyme activity resulting from the sum of PL, PG, PE activities measured individually.

Endozym Rouge HR is purified by the following activities:

CE (Cinnamyl Esterase): is an activity found in unpurified enzymes, which causes the formation of volatile phenols, compounds which lend unpleasant aromatic nuances to the wine, which, if present in high concentrations, are reminiscent of horse sweat.

→ DOSAGE

Between 1 and 5 mL/q of pressed or per hL of must. Contact times vary depending on the temperature and the SO₂.





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→ INSTRUCTIONS FOR USE

Dilute directly in 20-30 parts of un sulphured must or demineralised water, or add to the grapes, crushed grapes or must directly. Use at the start of or during tank filling.

→ ADDITIONAL INFORMATION

INFLUENCE OF SO₂

Enzymes are resistant to SO₂ levels normally used in winemaking, however it is good practice not to put them in direct contact with sulfur solutions.

ACTIVITY CONTROL

There are various methods for evaluating enzymatic activity. A system utilized by AEB is a method of direct measure, directly linked to the concentration of the PL, PG and PE; the total of the three activities yields the Total UP per gram unity. The determination methods of pectolitic units together with the relative activity diagrams are made available to all technical personnel by AEB.

→ STORAGE AND PACKAGING

Keep in the original sealed packaging away from light, and in a cool, dry, odour-free place at a temperature below 20°C. Do not freeze. Observe the expiry date on the packaging. Use promptly after opening.

250 g net bottles in cartons containing 1 kg.
1 kg net bottles in cartons containing 4 kg.