

# Why use ENZYMES IN ENOLOGY?

## Fining, Extraction and Aromatic Expression

Enzymes are essential for improving press yield, clarification, flotation, wine filterability, aroma and polyphenol extraction, as well as enhancing aromatic expression, improving mouthfeel, contributing to protein stability and helping to stabilize color.

## ENOLOGICAL ENZYMES

Enzymes are biological catalysts of reactions and naturally present in all living systems. Enological enzymes are blends in which each enzyme's activity plays a role to reach a specific goal.

## EVERY ENZYME HAS ITS FUNCTION

### Grape Maceration

■ **Pectinases, hemicellulases and cellulases** lyse berry cells and promote the extraction of aromatic precursors and polyphenolic compounds.

### Clarification

■ **Pectinases** accelerate the degradation of pectins and therefore facilitate fining.

### Must and Wine

■ **Glycosidases** release aromatic compounds linked to sugars and intensify the expression of varietal aromas.

**Betaglucanase**, capable of hydrolyzing glucans produced by molds present in yeast cell walls, improves filterability of wines obtained from *Botrytis* infected grapes and accelerates yeast lysis during lees ageing.

From knowledge of individual enzymatic activities and practical experience in the winery, emerges EnartisZym, a range of enzymatic preparations appropriately formulated to achieve maximum effectiveness in classic applications and in those related to the latest technologies.

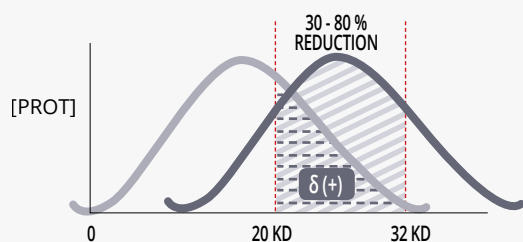
	ZYM AROM MP	ZYM COLOR	ZYM COLOR PLUS	ZYM RS	ZYM EZFILTER
Clarification/ Cold Settling	●			●●●	●●
Clarification of Difficult Juice				●●●	●●●
Clarification by Flotation				●●	
Maceration of White Grapes	●●●				
Rosé Wine Production	●●●		●●●	●●	
Maceration of Red Grapes		●●●	●●●		
Color Stability		●●	●●●		
Aromatic Enhancement	●●●				
Yeast Lysis					●●●
Improve Filtration	●	●●	●●	●●	●●●
<i>Botrytis</i>					●●●

## Must Settling ENARTISZYM RS

Pectolytic and hemicellulase liquid enzyme with intense, quick clarification.



### PROTEASE ACTIVITY REDUCES THE UNSTABLE PROTEIN FRACTION OF WINE



## Aroma Extraction and Protein Stability Improvement

### ENARTISZYM AROM MP

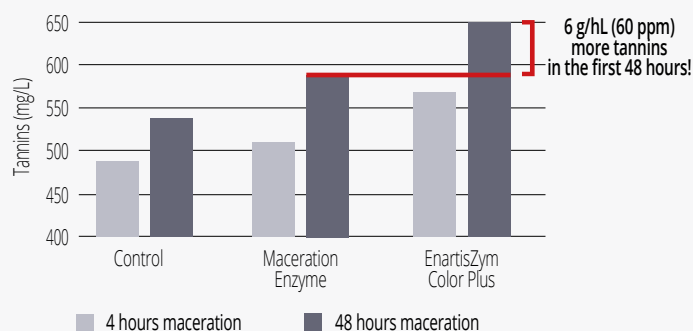
Micro-granulated enzyme for white grape maceration. Intensifies cell lysis and increases the extraction of aromatic precursors from the berry. The secondary protease activity assists in reducing bentonite fining.

## Color Stabilization

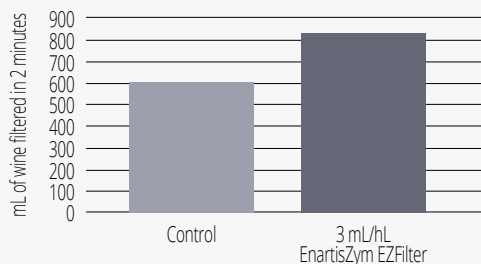
### ENARTISZYM COLOR PLUS

Micro-granulated enzyme for red grape maceration. In addition to intensifying the extraction of phenolic substances, it has secondary protease activity which hydrolyses grape proteins and reduces their ability to precipitate tannins. A higher content of grape tannins in the early stages of vinification ensures better color stability.

### ENARTISZYM COLOR PLUS INCREASES THE EXTRACTION OF TANNINS FROM GRAPES



### IMPACT OF ENARTISZYM EZFILTER ON FILTERABILITY\*



\*Wine made from *Botrytis* infected grapes. Filtration with diatomaceous earth and cellulose filter.

## Improved Filterability

### ENARTISZYM EZFILTER

Liquid enzymatic preparation with primary pectolytic and Betaglucanase activities and secondary Rhamnosidase, Hemicellulase and protease activities. It improves the filterability of must and wine due to its ability to hydrolyse pectins and polysaccharides from grapes and polysaccharides produced by microorganisms, such as glucans.

**enartis**

Inspiring innovation.

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