



# OENOLEES®

Specific preparation of yeast cell walls and inactivated yeasts (Patent EP 1850682) for eliminating specific polyphenols responsible for bitterness and astringency.

*Qualified for the elaboration of products for direct human consumption in the field of the regulated use in oenology. In accordance with the current EU regulation n° 2019/934.*

## SPECIFICATIONS

Developed as a result of LAFFORT®'s research on the properties of yeast lees and their importance in wine fining, OENOLEES® contributes towards improving the gustatory qualities of wine by:

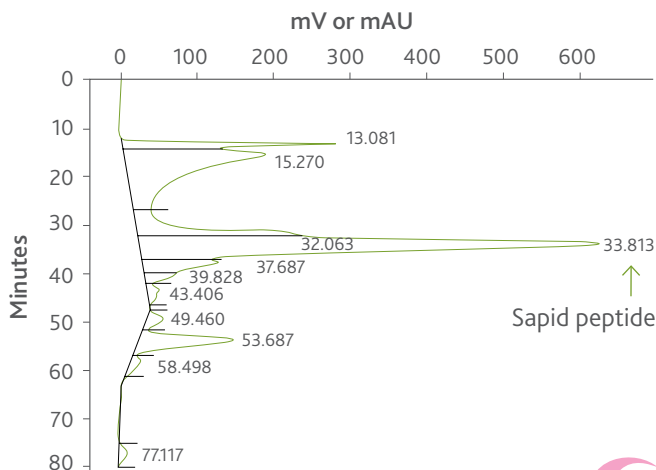
- **Reducing aggressive characters:** OENOLEES® cell walls exert a fining effect that encourages the elimination of specific polyphenols that are responsible for bitterness and astringency.
- **Elevating midpalate sensations:** OENOLEES® has a high content of a specific peptide fraction (Patent EP 1850682; Moine V. *et al.*, symposium Bordeaux 2007), naturally released by yeast during autolysis (maturing on lees). It possesses an excessively low perception threshold (16 mg/L compared with 3 g/L (30 ppm) for sucrose).

## OENOLOGICAL APPLICATIONS

- During alcoholic fermentation of red, rosé and white wines.
- During ageing (with or without lees) of red, white and rosé wines.
- For final correction, OENOLEES® can be used with an action time of 4 to 6 weeks.
- Inactivated yeasts naturally contain amino acids that constitute a nutritive input for yeasts, but they do not exempt from a nitrogen correction program. During ageing, inactivated yeast can help reducing the Ochratoxin A content in wines.

## EXPERIMENTAL RESULTS

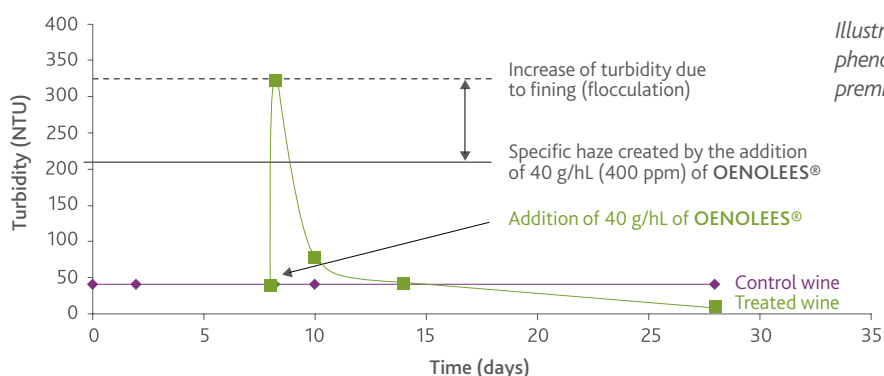
The molecular identification and targeted analysis methods (figure 1) allow optimization of the production of OENOLEES® and a confirmation of the extent of enrichment of the sapid peptide.



Determination of the sapid peptide content by HPLC analysis.



- The fining of bitterness and astringency shown by the flocculation of tannic substances at the time of the **OENOLEES®** addition.



*Illustration of the selective elimination flocculation phenomenon (Cabernet Sauvignon red wine, super premium segment).*

### PHYSICAL CHARACTERISTICS

Aspect ..... powder      Colour ..... white

### CHEMICAL ANALYSIS

Humidity (%) ..... < 7	Lead (ppm) ..... < 2
Ashes (g/100 g) ..... 5 - 10	Arsenic (ppm) ..... < 3
Nitrogen (g/100 g) ..... 5.5 - 7.5	Mercury (ppm) ..... < 1
Proteins (Nx6,25) (g/100 g) ..... 35 - 45	Cadmium (ppm) ..... < 1
Lipids (g/100 g) ..... 6 - 9	
Carbohydrates (g/100 g) ..... 37 - 48	

*(Including those from the yeast cell walls)*

### PROTOCOL FOR USE

#### DOSAGE

- Between 20 and 40 g/hL (200 - 400 ppm) depending on the desired effect.
- Maximum legal dosage EU: 160 g/hL (1600 ppm).

#### IMPLEMENTATION

It is advisable to solubilize **OENOLEES®** in 5 to 10 times its volume in water. After incorporation, homogenise by a pump-over for tanks and by « bâtonnage » (stirring the lees) for barrels.

### STORAGE RECOMMENDATION

- Store above ground level in a dry area not liable to impart odours. Ensuring stock is kept at a moderate temperature, in its original, unopened packaging.
- Optimal date of use: 3 years.
- Do not use opened packaging.

### PACKAGING

- 1 kg bags - 10 kg boxes.
- 5 kg bags - 10 kg boxes.

