

Genesis Fresh

Fermentation complement to keep the freshness and youth of white and rose wines.

The **Genesis** line of product from **Oenofrance** is the result of 10 years of research conducted in collaboration with the University Jules Guyot in Dijon about the products based on yeast and their practical interest in winemaking.

The acquired knowledge opens today to innovative product, **Genesis Fresh**, a fermentation complement allying inerted yeast with cellulose. The selected strain and the production process allowed us to increase the amount of polysaccharides and of peptides, particularly the oligopeptides with reductive properties.

Made available, those peptides prevent the browning of the white and rose wines while maintaining the freshness of the aromas, specially the volatiles thiols that are most sensitive to oxidation.

Composition :

Inerted yeast
Microcrystalline cellulose

Properties :

The anti-oxidative of the peptides brought by **Genesis Fresh** preserve the color and aromas of the white and rose wines. The oxido-reduction graphs show that wines having fermented with **Genesis Fresh** have a better resistance to oxidation than the control lot or the wine fermented with a common inerted yeast.

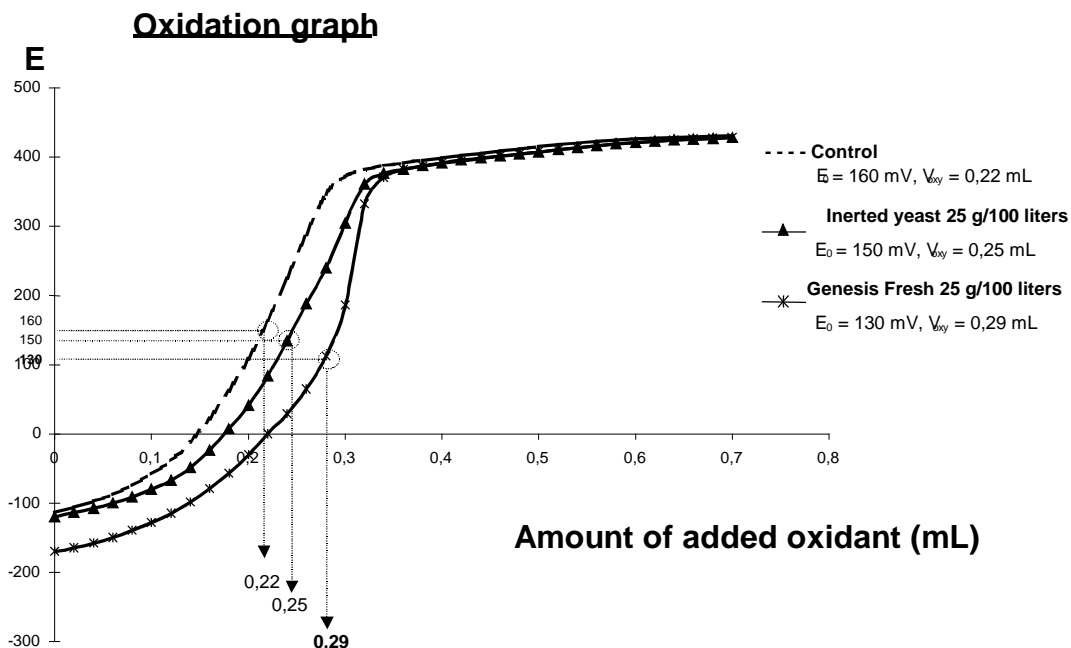
Reminders :

- **The oxido-reduction potential** of a wine is the assessment of its level of oxidation and reduction. When the wine contains the same amount of oxidative and reductive components, it is at its normal oxido-reduction potential, called E_o .
- **The oxidation graph** hints about the normal oxido-reduction potential of a wine at a given time. It also shows the ability of a wine to resist oxidation.

This graph is obtained by, first reducing all the oxidant/reducing pairs (Redox pairs) of the wine and then, by adding increasing amounts of oxidant to reach the oxidation of all the Redox pairs. The oxido-reduction potential of the wine (E) is measured after each addition.

From the curve obtained, we can find-out the normal oxido-reduction potential E_o which is specific to each wine as well as the volume of oxidant (V_{oxy}) needed to reach E_o . The greater the V_{oxy} , the greater the ability of the wine to resist oxidation.

To summarize the above, a wine having at the same time a low E_o and a high V_{oxy} is more reductive and therefore has a better resistance to oxidation than a wine with a higher E_o and a lower V_{oxy} .



In the above experiment, the white wine having fermented with **Genesis Fresh** shows both a lower E_0 and a higher V_{oxy} . It is therefore significantly more resistant to oxidation than the other 2 wines : the control and the wine fermented with a standard inerted yeast. This result is confirmed by the measurement of the Optical density at 420 nm (DO 420, measurement of the browning). In the above experiment, the wine fermented with **Genesis Fresh** had a DO 420 of 0.17 versus 0.38 for the control

Moreover:

- The inerted yeast provide amino acids and polysaccharides that enhance the fermentability of the must
- The cellulose facilitates the removal of the CO_2 and acts as a support for the yeast. It decreases the lag phase where the juice is most sensitive to oxidation.

Genesis Fresh doesn't provide thiamin. It can be supplemented with **Activateur S** or **Vinitamine S**, sources of nitrogen and growth factors.

Applications :

Genesis Fresh is designed for the white juices that are sensitive to oxidation, to the over-decanted juices and to make wine with volatile thiols in the aromas.

Use rate :

25 to 35 g/100 liters

Instruction :

Dilute in 5 times its volume of juice. Add to tank just before the yeasts and mix well.

Pack size and storage :

Bags of 1 kilogram. Store unopened in a dry, dark, odorless and cool place.