



# Opti'Malo Blanc™



## MLF Nutrient to support bacteria growth and shorten MLF duration in white and rosé wines

### ORIGIN AND APPLICATION

**Opti'Malo Blanc™** is a blend of inactivated yeast, rich in amino acids and specific peptides, particularly suited for the growth of Lallemmand selected wine bacteria, for optimal MLF kinetics.

To ensure good MLF kinetics, wine bacteria must have the ability to grow in wine to degrade all the malic acid. The oenological conditions in white and rosé wines, are not always suitable for the growth of bacteria, so the risk of inhibition by deficiency of growth factors needs to be avoided. Many nutrients required for this growth have been well-documented, such as, carbon and nitrogen sources, vitamins and minerals. Our recent studies have shown that the bioavailability of certain peptides strongly favour the growth of Lallemmand selected wine bacteria and are particularly effective at reducing the MLF duration in white winemaking conditions.



- **Opti'Malo Blanc™** helps achieve rapid growth of selected wine bacteria which can be compromised in white wine conditions.
- **Opti'Malo Blanc™** compensates for deficiencies in amino nitrogen in white and rosé wines, fueling bacteria for efficient metabolism of malic acid.
- Specific peptides in **Opti'Malo Blanc™** are not only nitrogen sources, they are growth stimulators, helping maintain optimal bacteria numbers during MLF in the challenging conditions of white wine.
- Helps shorten MLF duration.
- The use of **Opti'Malo Blanc™** helps bacterial metabolism in low pH and / or low turbidity conditions, due to the specific peptides, thereby improving MLF kinetics.
- Clarification, sometimes excessive, can accentuate the risk of nutritional deficiencies; hence the use of OptiML BLANC® is highly recommended in this situation.

### INSTRUCTIONS FOR USE

The recommended dosage is 20g/hL, calculated on the final volume of wine. Suspend **Opti'Malo Blanc™** in a small amount of water or wine and add to the wine any time from 48 hours prior or up until the same time as the addition of bacteria.



Figure 1 demonstrates the findings that certain peptides contribute to better bacterial numbers and MLF kinetics when compared to other peptide fractions. These 'ideal' peptides have been included in **Opti'Malo Blanc™** to promote bacterial growth. ATP generated by transporting peptides can be used to supply much of the metabolic energy required for cell growth and maintenance (Ritt *et al*, 2008).

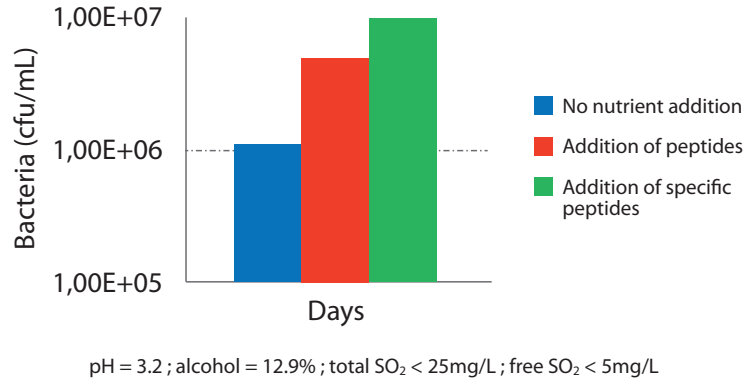
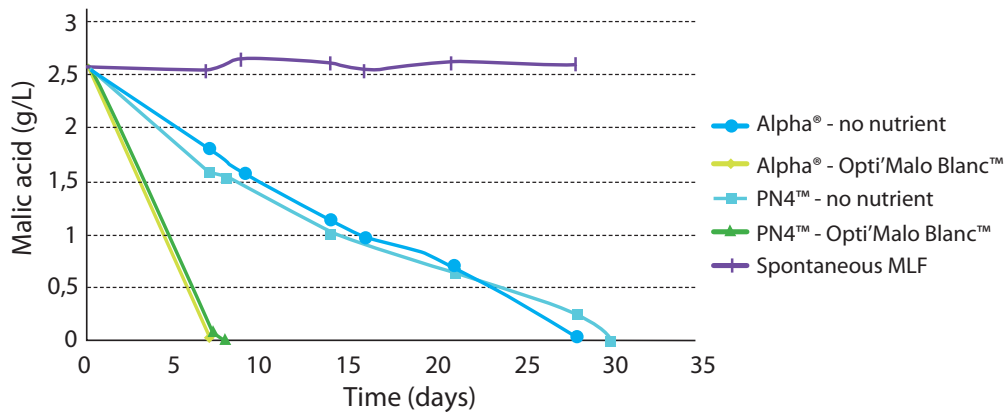


Figure 1: Bacteria growth, Chardonnay 2010 inoculated with selected bacteria

Figure 2 demonstrates that the use of **Opti'Malo Blanc™** significantly improves MLF kinetics when used with our selected wine bacteria.



Chardonnay Burgundy 2011: pH = 3.2 ; ethanol = 13% ; total SO<sub>2</sub> < 25 mg/L ; free SO<sub>2</sub> < 5 mg/L

Figure 2: Malic acid degradation

#### PACKAGING AND STORAGE

- **Opti'Malo Blanc™** is a powder packaged in 1 kg sachets.
- When stored in a cool dry place, **Opti'Malo Blanc™** maintains its effectiveness for 4 years. Avoid moisture or prolonged exposure to high temperatures.

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