

NEW MLF BACTERIA STRAIN FOR HIGH ALCOHOL AND PHENOLIC LEVELS THE NEW STANDARD FOR THE MALOLACTIC FERMENTATION

► The solution for high alcohol and elevated phenolic conditions

MaloBacti™ AF3 is another strain of freeze dried MLF starter cultures of *Oenococcus oeni* with unique properties. MaloBacti™ AF3 was selected for special requirements of the malolactic fermentation in wines with high alcohol and phenolic levels.

- High tolerance to high phenolic conditions
- Very high tolerant to high alcohol conditions in wine, up to 17% Vol. Alc.
- Outstanding fruity flavour profile, for condimental wines

► New +A³ process

The new +A³ process accommodates an increased number of active cells in combination with a so far unreached fast activation and perfected adaption of the bacteria for the inoculation in wine or must.



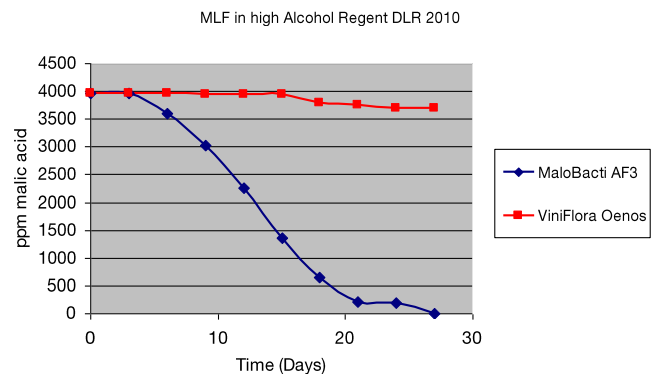
- For fruity red and white wines with high phenol and alcohol levels
- Increase of the survival rate of the bacteria at inoculation.
- Ideal adaptation to difficult conditions in wine already in 6-8 hours!

► MLF for high alcohol and elevated phenolic levels

See the example of a Regent 2010 of DLR Bad Kreuznach with high alcohol:

- 17.5% Vol. Alc.
- pH: 3.6
- TA 7,4 g/l
- Phenols: 2984 ppm

In this direct comparison on the right side you can see that MaloBacti™ AF3 works even under difficult conditions for a MLF.



Important information

- To dissolve product exactly **1L** of water is needed for a **25 hL**-pouch and exactly **10L** for a **250 hL**-pouch.
- **First** put in the +A³-media (1), **then** the bacteria (2). The water has to be non-chlorinated and non-distilled.

► Additional information

After activation of the bacteria the suspension can be stored for **max. 5 days at 4-6 °C**. For another inoculation with the stored suspension adjust the temperature to the wine's temperature. Stir well again before inoculation. The addition of SO₂ can be done right after the completion of the MLF in order to avoid the growth of other undesired micro-organisms.

The addition of Thiamine (Vit.B1) or FermControl™ to the primary fermentation is recommended to reduce the SO₂ formation of yeast.

► Package content


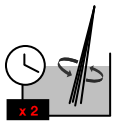
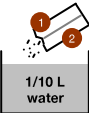
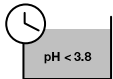
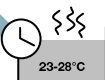
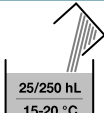
Available for 25 hL and 250 hL (or MaxBacti™ AF3 for 5,000 hL) wine or juice. Freeze-dried MLF starter cultures; *Oenococcus oeni* with a minimum cell count of > 2 x 10¹¹ CFU/g. Strain: 22582.

► Shelf life / storage

- 2 years at min. -18 °C
 - 4 weeks at +5 °C
 - 5 days at 4-6 °C, if product is already activated
- Store frozen, always use the whole package at once



PRACTICAL APPLICATION ADVICE

<p>1</p>  <p>Oenological properties</p> <ul style="list-style-type: none"> ▶ SO₂: tolerance at pH 3.4 < 60ppm ▶ pH range from 3.3 to 4.2 ▶ Ethanol tolerant up to 17.0% Vol. Alc. ▶ Temperature range: 15-26°C ▶ For fruity and condimental wines 	<p>4</p>  <p>During activation stir suspension twice.</p>
<p>2</p>  <p>water ▶ non-chlorinated, non-distilled</p> <p>1L ▶ 25 hL-pouch</p> <p>10L ▶ 250 hL-pouch</p> <ul style="list-style-type: none"> ▶ keep water at 23-28 °C ▶ 1. dissolve the +A³-media (chamber 1) in water ▶ 2. dissolve the bacteria (chamber 2) in solution, stir for approx. 5-8 min. 	<p>5</p>  <p>After maximum 8 hours of activation the pH will drop to < 3.8. The bacteria are now completely activated. Check with a pH-meter.</p>
<p>3</p>  <p>The activation of the suspension will take 6-8 hours at 23-28 °C.</p>	<p>6</p>  <p>Stir suspension again and inoculate in 25/250 hL of wine. Stir well again. Maintain temperature of wine at approx. 15-20 °C during MLF.</p>

