

NEW FREEZE DRIED BACTERIA STRAIN WITHOUT CITRIC ACID METABOLISM THE NEW STANDARD FOR MLF IN RED AND WHITE WINE

▶ No more diacetyl in wine

MaloBacti™ CN1 represents a new generation of freeze dried MLF starter cultures of *Oenococcus oeni* with unique properties. MaloBacti™ CN1 has the ability to avoid diacetyl formation from citric acid degradation.

- ▶ Protection of the varietal characters and flavours the in wine after MLF
- ▶ No increase in the volatile acidity in the wine because no acetic acid production
- ▶ No buttery or butter-scotch flavor because there is no diacetyl production

▶ 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.



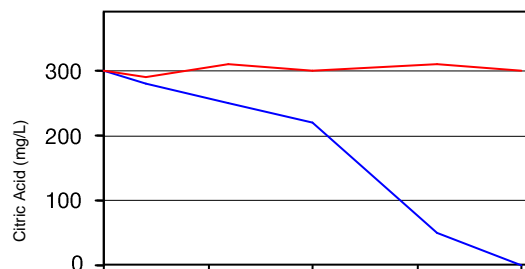
- ▶ For fruity red and white wines. No more diacetyl flavour and no more volatile acids!
- ▶ Increase of the survival rate of the bacteria at inoculation.
- ▶ Ideal adaptation to difficult conditions in wine already in 6-8 hours!

▶ No degradation of Citric Acid

MaloBacti™ CN1 protects the fruity flavors in the wine because the culture does not degrade the citric acid. This also reduces the risk of haze in the wine because the citric acid forms stable compounds with metal ions, the wines stay fresh.

MaloBacti™ CN1 does not produce acetic acid from the citric acid. Therefore no increase in volatile acidity as normally observed during malolactic fermentation. Even in wines from highly botrytis infected grapes, the formation of VA is very much limited.

— MaloBacti™ CN1 — Reference



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

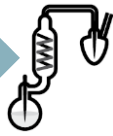
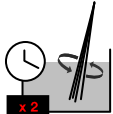
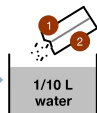
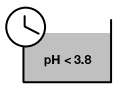

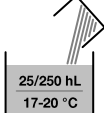
Available for 25 hL and 250 hL (or MaxBacti™ CN1 for 5,000 hL) wine or juice. Freeze-dried MLF starter cultures; *Oenococcus oeni* with a minimum cell count of > 2 x 10¹¹ CFU/g. Strain: 22827.

▶ 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"> ▶ NO FORMATION OF DIACETYL ▶ SO₂: tolerance at pH 3.3 < 20ppm ▶ pH range from 3.2 to 4.2 ▶ Ethanol tolerant up to 14.0% vol. ▶ Temperature range: 17-26 °C ▶ For red and white wine 	<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. 17-20 °C during MLF.</p>

