



MCBB™

MBR™ process
direct inoculation

APPLICATION

Lalvin MCBB™ was selected as a very efficient malolactic bacteria, for white wines, able to produce high concentrations of diacetyl (buttery notes) when inoculated at the end of alcoholic fermentation.

Lalvin MCBB™, Malolactic Culture Butter Bomb, is a robust wine bacteria able to grow quickly and achieve reliable MLF under a broad range of winemaking conditions.

The metabolism of citric acid through to diacetyl is wine bacteria dependent. **Lalvin MCBB™** is recognized for its strong ability to synthesize high diacetyl concentrations. Integrated with desirable buttery and nutty notes, **Lalvin MCBB™** gives complexity, with freshness and mouthfeel, resulting in well balanced white wines.

Highest diacetyl production occurs when **Lalvin MCBB™** is inoculated after alcoholic fermentation and can be maximized if the malolactic fermentation is performed at 16-18°C (60-64°F), at low pH and with minimum lees contact.



When used in sequential inoculation (post alcoholic fermentation inoculation), Lalvin MCBB™ is the perfect tool to produce traditional and complex buttery driven white wines.

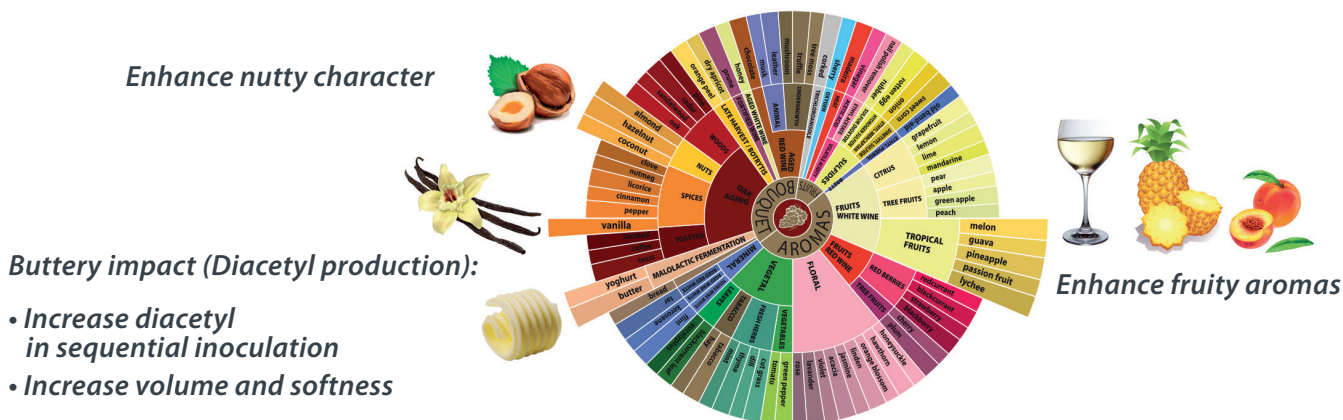
MICROBIAL AND OENOLOGICAL PROPERTIES

- pH tolerance ≥ 3.2
- Alcohol tolerance: up to 15.5 % vol.
- SO₂ tolerance: up to 60 mg/L total SO₂ (pay attention to molecular SO₂ at low pH)
- T° tolerance > 14°C
- MLF kinetic: Fast to moderate
- Low volatile acidity production
- Bacteria cinnamyl esterase negative: cannot produce precursors for ethylphenol production by *Brettanomyces*
- No production of biogenic amines
- High nutrition demand: it is strongly recommended to add a bacteria nutrient such as **OPTI'MALO BLANC™** to reduce the potential deficiencies of the white wines.

The MBR® form of lactic acid bacteria represents a Lallemand specific process that subjects the lactic acid bacteria cells to various biophysical stresses, making them better able to withstand the rigors of direct addition to wine. The conditioned MBR® lactic acid bacteria that survive are robust and possess the ability to conduct reliable malolactic fermentation (MLF).

ORGANOLEPTIC PROPERTIES

Beyond bio-deacidification, **Lalvin MCBB™** is a true winemaking tool, contributing to the sensory complexity and the quality of white wine as follows:



This sensory contribution can be further supported by the combination with an appropriate selected wine yeast.

INSTRUCTIONS FOR USE

SEQUENTIAL INOCULATION (Post-alcoholic fermentation)

Bacteria inoculation: two options:

- 1) Direct inoculation without rehydration : open the sachet and add the bacteria directly into the wine after the end of alcoholic fermentation at the top of the tank or while racking the tank and ensure good mixing.
- 2) Direct inoculation with rehydration step: for best distribution, you can rehydrate the packet of freeze-dried selected wine bacteria in 20 times its weight of clean chlorine free water at 20°C for a maximum 15 minutes. Add this suspension directly to the wine at the end of the alcoholic fermentation.

Then follow the protocol:

- Stir gently to evenly distribute the selected wine bacteria and minimize the oxygen pickup.
- Under more difficult conditions, add a specific bacteria nutrient, such as **OPTI'MALO BLANC™**.
- Check malolactic fermentation activity (malic acid degradation) every 2 to 4 days.
- Stabilize wine once malolactic fermentation (MLF) is finished.

Recommended temperature range:

- White wine: from 16 to 20°C.

PACKAGING AND STORAGE

- Available in dosage for 25 hL.
- This product can be stored for 18 months at 4°C and 36 months at - 18°C in original sealed packaging.
- Once opened, the sachet must be used immediately.
- Sealed packets can be delivered and stored for 3 weeks at ambient temperature (<25°C) without significant loss of viability.

The information herein is true and accurate to the best of our knowledge; however, this data sheet is not to be considered as a guarantee, expressed or implied, or as a condition of sale of this product.