



ENOFERM BETA™

Oenococcus oeni



Vigourous and suitable for co-inoculation to enhance fruit.



As a producer of wine lactic acid bacteria, Lallemand developed a specific MBR™ production process that subjects the wine bacteria cells to various biophysical stresses, making them 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).

DESCRIPTION

ENOFERM BETA™, selected by the European Craft malolactic bacteria selection project, is a vigorous bacteria able to grow quickly and to achieve reliable MLF under most winemaking conditions.

ENOFERM BETA™ is a powerful starter culture for co-inoculation that increases fruit flavor expression, best suited for:

- Red wines with high tannin structure: to enhance the level of red berry fruit characters, which contribute to red fruit notes and mouth sensations.
- White wines: to preserve and develop the fruity expression.

Produced with our MBR™ process, ENOFERM BETA™ is competitive which helps to have a rapid start of MLF with a fast dominance in must or wine, allowing a fast MLF kinetic with a better control of wine quality.



BENEFITS & RESULTS

ENOFERM BETA™ is an active wine bacteria with an easy-to-use protocol (direct inoculation without any rehydration step).

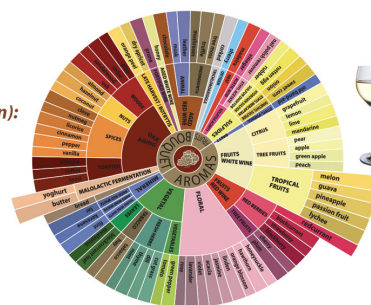
Beyond deacidification, ENOFERM BETA™ helps to preserve wine quality, enhancing wine aroma complexity in red and white wines. Used in sequential inoculation in white wines, it brings volume and buttery flavours.

Buttery impact (Diacetyl production):

- Moderate to high in Sequential inoculation
- Low in Co-inoculation



High in butandiol
= increase volume and softness



Enhance fruity aromas

ENOFERM BETA™ is a bio-protection tool to protect wines against *Brettanomyces* when inoculated as soon as possible to prevent the excessive development of the spoilage yeast.

PROPERTIES

- pH tolerance: > 3.2
- Alcohol tolerance: up to 15 % vol.
- SO₂ tolerance: up to 60 mg/L total SO₂ (pay attention to molecular SO₂ at low pH)
- T° tolerance: > 14 °C
- High nutritional demand
- Good implantation
- MLF Kinetic: Fast
- Low volatile acidity production
- No production of biogenic amines
- Highly recommended for co-inoculation
- Bacteria cinnamoyl esterase negative: cannot produce precursors for ethylphenol production by *Brettanomyces*

INSTRUCTIONS FOR OENOLOGICAL USE

Use one sachet for right quantity of hL indicated on label. Lowering the dosage or doing cross seeding or pitching methods will reduce the bacteria performance.

Co-inoculation (simultaneous Alcoholic fermentation)

1. Yeast addition

Rehydrate the selected dry yeast according to the instructions. Preferably in presence of a rehydration nutrient and inoculate the must.

2. Bacteria addition

Depending on the SO₂ addition at crush:

- SO₂ addition < 5 g/hL: wait for 24 hours
- SO₂ addition 5-8 g/hL: wait for 48 hours

■ Direct inoculation of bacteria without rehydration: open the sachet and add the bacteria directly to the must/wine to be fermented from the top of the tank (white must) or during a pumping-over (red must).

■ Direct inoculation with rehydration step: for best distribution, you can rehydrate the packet of freeze-dried lactic acid bacteria in 20 times its weight of clean chlorine free water at 20 °C for a maximum of 15 minutes and add the suspension to the must/wine to be fermented.

- Assure a good distribution.
- Carefully monitor must temperature, which must be below 30 °C at lactic acid bacteria inoculation (alcohol < 5 %vol) and below 27 °C when the level of 10 % alcohol is reached.
- Complex nutrients addition at 1/3rd of alcoholic fermentation is recommended.
- Monitor malic acid and volatile acidity.
- Top the wine after alcoholic fermentation (AF).
- Otherwise rack and stabilize after MLF.

Sequential inoculation (post-alcoholic fermentation)

Bacteria inoculation: two options

■ 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 emptying the tank.

■ 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 towards the end of the alcoholic fermentation.

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

Recommended temperatures:

- White wine / rosé wine: from 16 to 20 °C
- Red wine:
 - › If alcohol < 14.5% vol.: from 17 to 25 °C, with an optimal range: 18-22 °C
 - › If alcohol > 14.5% vol.: from 18 to 20 °C

PACKAGING & STORAGE

- Product in powder form obtained by lyophilization.
- Available in different dosages for 2.5 hL (66 US gal.), for 25 hL (660 US gal.), for 250 hL (6,600 US gal.).
- Once opened, lactic acid bacteria sachet must be used immediately.
- This product can be stored for 18 months at 4 °C/40 °F or 36 months at -18 °C/0 °F in original sealed packaging.
- Sealed packets can be delivered and stored for 3 weeks at ambient temperature (<25 °C/77 °F) without significant loss of viability.

Distributed by:

The information in this document is correct to the best of our knowledge. However, this data sheet should not be considered to be an express guarantee, nor does it have implications as to the sales condition of this product. January 2022.



WINE
YEASTS



WINE
BACTERIA



NUTRIENTS
/PROTECTORS



SPECIFIC
YEAST DERIVATIVES



ENZYMES



CHITOSAN



VINEYARD
SOLUTIONS



LALLEMAND OENOLOGY

Original by culture