



# Secure and highly efficient wine bacteria



As a producer of wine lactic acid bacteria, Lallemand developed a specific MBR $^{\text{m}}$  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 $^{\text{m}}$  lactic acid bacteria that survive are robust and possess the ability to conduct reliable malolactic fermentation (MLF).

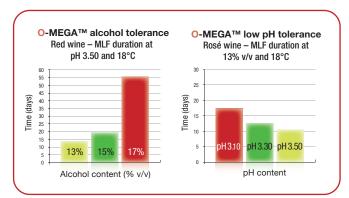
## **DESCRIPTION**

O-MEGA<sup>™</sup> was isolated from nature and selected in South of France by the Institut Français de la Vigne et du Vin (IFV) for its high capacity to quickly achieve malolactic fermentation (MLF) in a very wide range of applications.

Produced with our  $MBR^{\mathbb{M}}$  process, O-MEGA<sup> $\mathbb{M}$ </sup> is very competitive which helps to have a high dominance in must or wine, to better control MLF and wine quality. O-MEGA<sup> $\mathbb{M}$ </sup> is a secure and efficient wine bacteria which tolerates low pH, high alcohol conditions or low temperature.



## **BENEFITS & RESULTS**



O-MEGA<sup>™</sup> has a very fast kinetic of malic acid degradation under limiting conditions and can achieve a complete MLF up to 17% vol of alcohol, or at PH >3.1, with an easy-to-use protocol (direct inoculation without any rehydration step).

Reliable on white, red and rosé wines, O-MEGA™ complements fresh and fruit driven wines and helps to stabilize red wine color because of its slower degradation of acetaldehyde.

O-MEGA<sup>™</sup> contributes to produce very fresh and fruity red wines from high maturity. On normal mature grapes, O-MEGA<sup>™</sup> reinforces the aging potential.

O-MEGA $^{\text{M}}$  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 ≥ 3.1
- T° tolerance ≥ 14°C
- Alcohol tolerance: up to 16% volume (can tolerate up to 17% volume).
- SO<sub>2</sub> tolerance: up to 60 mg/L total SO<sub>2</sub> (pay attention to molecular SO<sub>2</sub> at low pH)
- Good implantation short lag phase
- MLF kinetic: very fast
- Late degradation of citric acid: very low production of diacetyl (no buttery or lactic notes)
- · Higher color intensity

- No production of biogenic amines
- · Very low volatile acidity production
- Low nutritional demand. Under more difficult MLF conditions, we advise to use a specific bacteria nutrient:
  - for white and rosé wines to avoid amino acids deficiencies and ensure a good growth of the selected bacteria,
  - for structured red wines to avoid amino acids deficiencies and increase the resistance of the selected bacteria against certain inhibitory polyphenolic fractions.



## INSTRUCTIONS FOR OFNOLOGICAL 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.

#### 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: 16 to 20°C.

• Red wine: 17 to 25°C.

If limiting conditions (high alcohol > 14.5 vol, or high  $SO_2 > 45$  ppm): from 18 to 22°C.

## PACKAGING & STORAGE

- Product in powder form obtained by lyophilization.
- Available for 2.5 hL (66 US gal.), 25 hL (660 US gal.) and 250 hL (6,600 US gal.)
- This product can be stored for 18 months at 4°C/39°F and 36 months at -18°C/0°F in original sealed packaging. Once opened, the sachet must be used immediately.
- During delivery, sealed packets can be held at ambient temperature for 3 weeks (< 25°C / 77°F) without significant loss of viability.

Distributed by:



1480 Cader Lane Petaluma, California 94954 (707) 765-6666 www.scottlab.com

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. March 2024 (Scott Laboratories).















