# **MALOBOOST®**

Lactic acid bacteria activator facilitating the start of the malolactic fermentation (MLF) and accelerating the kinetic. Suitable for the preparation of products intended for direct human consumption, in the scope of regulated use in oenology.

Complies with Commission Regulation (EU) 2019/934.

# SPECIFIC CHARACTERISTICS

MALOBOOST® is adapted to the nutritional needs of lactic acid bacteria thanks to a specific formulation of inactivated yeasts providing the nutritional elements necessary for Œnococcus oeni.

#### **OENOLOGICAL PROPERTIES**

MALOBOOST® promotes the growth of lactic acid bacteria and allows for a faster MLF.

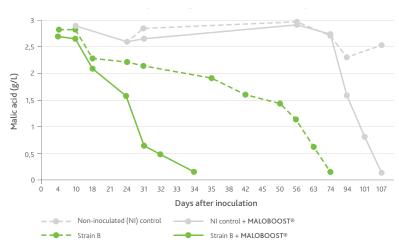
MALOBOOST ® is mainly used:

- In wines lacking in nutrients (thermovinification, absence of lees, very low turbidity...).
- · After a sluggish alcoholic fermentation.
- In case of difficult conditions: High ABV, low temperature, low acidity, late or "springtime" MLF...
- Suitable for all types of wine.

MALOBOOST® is neutral from an organoleptic point of view.

## **EXPERIMENTAL RESULTS**

Study of a Cabernet Sauvignon wine (ABV: 14.04 % vol.; pH: 3.62; L-malic acid:  $3.34 \text{ g/L H}_2\text{SO}_4$ ). Inoculation with different malolactic starters at 1 g/hL. **MALOBOOST**® is added 24 hours before inoculation at a dose of 30 g/hL. The wine is kept at  $18^{\circ}\text{C}$  ( $64^{\circ}\text{F}$ ) for the purposes of this trial.



#### Malic acid degradation kinetic

Strain B completes malolactic fermentation in 74 days without activator, the addition of MALOBOOST® before inoculation allows completion of the MLF in 34 days, thus more than halving the MLF time.

In the absence of inoculation with selected lactic acid bacteria, MLF is still not clearly started after 107 days. The addition of MALOBOOST® makes it possible to set off and finish the MLF from the microflora initially present in the wine.

MALOBOOST® is a facilitator of malolactic fermentation.



#### PHYSICAL CHARACTERISTICS

Appearance	powder
Colour off-whi	te/beige

Apparent density (g/L) ...... < 600

#### CHEMICAL AND MICROBIOLOGICAL ANALYSIS

Humidity (%)< < 7
Total nitrogen (%) < 10
Protein (%) ≈ 60
Total carbohydrate (%) ≈ 25
Minerals (%) ≈ 8
Salmonella (/25 g) none

stapriytococcus (18) Hone
E. coli (/g)none
Arsenic (ppm)
Lead (ppm)
Mercury (ppm)
Cadmium (ppm)<

#### **PROTOCOL FOR USE**

# **OENOLOGICAL CONDITIONS**

Use in combination with selected lactic acid bacteria.

- With early co-inoculation (addition of lactic acid bacteria at the start of alcoholic fermentation), if the MLF is not finished or sufficiently advanced at the end of AF, add MALOBOOST® as soon as the wine is dry.
- With late co-inoculation (addition of lactic acid bacteria in the last stages of alcoholic fermentation: density less than 1.010), add MALOBOOST® at the end of alcoholic fermentation.
- With sequential inoculation (addition of lactic acid bacteria after alcoholic fermentation), add MALOBOOST® at the time of inoculation or no more than 24 hours before or after.
- In the case of curative or "springtime" MLF, where nutritional deficiencies are more frequent and the content of inhibiting compounds higher, add MALOBOOST® 24 hours after inoculation with bacteria.
- In the case of a sluggish MLF or if MLF does not start, MALOBOOST® can be used to facilitate start-up or restart, possibly in association with OENOCELL® or OENOCELL® BIO.

#### **IMPLEMENTATION**

 Use an inert, clean container. Dissolve the total quantity of MALOBOOST® needed in 10 times its weight of water or wine. Add to the wine while pumping over, to homogenise without adding oxygen.

#### **DOSAGE**

- To facilitate and accelerate the fermentation kinetics: 20 30 g/hL.
- Sluggish or blocked MLF: 30 to 40 g/hL in 1 or 2 additions 5 days apart.

# STORAGE RECOMMENDATION

- Store off the ground in the original unopened packaging at a moderate temperature in a dry area not liable to impart odours.
- Optimal date of use: 3 years.

## PACKAGING

• 1 kg bag.

