



Acti-ML™

The Activator to use during wine bacteria rehydration.

ORIGIN AND APPLICATION

The growth and activity of malolactic bacteria is dependent on many factors, including:

- Wine temperature, SO₂ levels, pH and alcohol levels
- Presence of inhibitors such as polyphenols and medium-chain fatty acids
- Nutrient availability.

Since *Oenococcus oeni* is affected differently by many of these factors, **Acti-ML™** was formulated by Lallemand's R&D team to strengthen the development of MBR® malolactic bacteria, especially under difficult conditions.

OENOLOGICAL PROPERTIES

- When used as directed, Acti-ML™ will not contribute any aroma or flavor to the wine.
- Please note that cellulose was chosen as an ingredient for this formulation as it will increase the surface area and keep the bacteria in better suspension for optimizing activity.

INSTRUCTIONS FOR USE

Based on current research, Lallemand recommends using **Acti-ML™** during rehydration.

Dissolve 20 g of **Acti-ML™** into 200 mL of 25°C clean water then add 1 g of bacteria. Wait 15 minutes and add the suspension to 100 L (1 hL or about 26 US gallons) of wine. Addition rates for some popular volumes:

Volume of wine	Volume of rehydration water	Grams of Acti-ML	Grams of bacteria
100 L	200 mL	20 g	1 g
2.5 hL	500 mL	50 g	2.5 g
25 hL	5 L	500 g	25 g
250 hL	50 L	5 kg	250 g

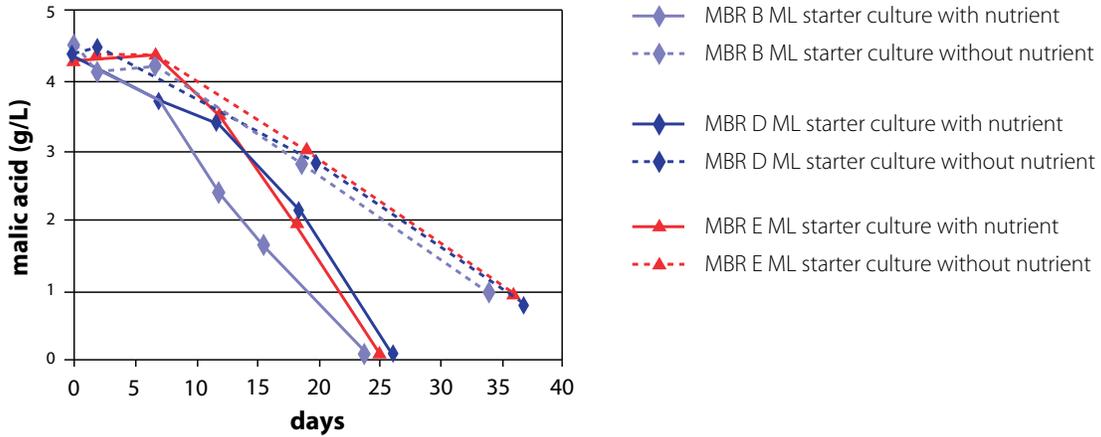
- If the bacteria fermentation becomes sluggish or stuck, an additional dose of **Acti-ML™** at the rate of 20 g/hL of wine may effectively restart malolactic fermentation.

COMPOSITION

- Acti-ML™ is a 100% biological blend of specific inactivated yeasts and cellulose. These inactivated yeasts provide important malolactic bacteria growth factors, especially amino acids, peptides, vitamins and essential trace elements.
- Inactivated yeast, along with cellulose, can help keep malolactic bacteria in suspension and may help avert the influence of inhibitors.



Kinetics of malic acid degradation in a 2003 Chardonnay (alcohol 14.1% vol., T SO₂ 14PPM, PH 3.38) after direct inoculation with selected malolactic starter cultures with and without the addition of ML nutrient Acti'ML™



PACKAGING AND STORAGE

- Available in 1 kg foil packs suitable for treatment of 50 hL (1,320 US gallons).
- Store cool and dry in the sealed container in an odor-free environment.
- Shelf life is up to 3 years when stored properly.

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.