



# Biological stabiliser with high effectiveness against lactic acid bacteria

### **CHARACTERISTICS**

Specific preparation that enhances the synergistic effect of fumaric acid and chitosan as biological stabilisers against lactic acid.

It combines the bacteriostatic and bactericidal properties of fumaric acid, which acts by permeabilising the membrane of lactic bacteria, and the antimicrobial effect of chitosan by altering the cellular structure.

MICROSTAB ML inhibits malolactic fermentation for long periods of time and can even stop malolactic fermentation that has already started. In addition, MICROSTAB ML reduces *Brettanomyces* populations, decreasing the risk of alterations due to the presence of this contaminating yeast. Thanks to this specific preparation, it will be possible to reduce the dose of SO<sub>2</sub> during storage.

#### **APPLICATION**

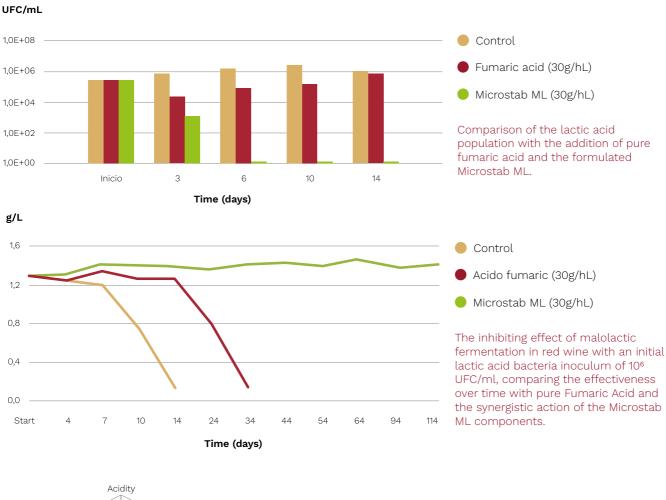
In white and red wines with the aim of:

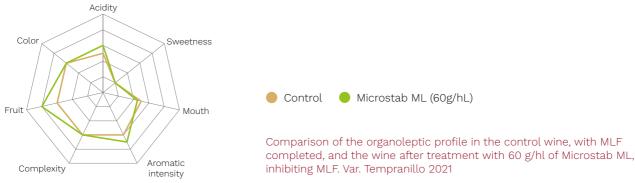
Controlling malolactic fermentation. It delays and even inhibits malolactic fermentation.	It maintains the
acidity and the initial pH of the wines and reduces the formation of biogenic amines.	

- ☐ Improving microbiological stability. It substantially reduces the population of lactic acid bacteria and helps control the *Brettanomyces* population.
- □ Reducing the dose of SO<sub>2</sub>. Thanks to the improvement of microbiological stability, MICROSTAB ML helps to reduce the dose of sulphur dioxide used when storing wines.

MICROSTAB ML, when used to treat wines at the recommended dosage, does not modify the olfactory profile of the wine, avoiding possible deviations derived from the development of lactic acid bacteria; furthermore, it also helps to maintain the wine's initial acidity.







#### COMPOSITION

Fumaric acid (E297) and chitosan.

#### **DOSAGE**

Wine: 30-60 g/hl



## **INSTRUCTIONS FOR USE**

- 1. Resuspend in 15 times its weight in wine, shaking
- 2. Incorporate into the total volume of the wine, ensuring homogenisation. Ensure a temperature above 12° C

#### PHYSICAL APPEARANCE

White crystalline powder.

#### **PRESENTATION**

1 kg and 15 kg container.

# PHYSICO-CHEMICAL AND MICROBIOLOGICAL PROPERTIES. EP 896 (rev.0)

pH (0.05%)	3 – 3,2
Humidity [%]	< 3
As [mg/kg]	< 3
Pb [mg/kg]	< 2
Hg [mg/kg]	< 1
Total count [CFU/g]	< 10 <sup>3</sup>
Salmonella [CFU/25g]	ABSENCE

Treatment	рН	Total Acidity (g/l)
Control	3.73	4.95
Microstab ML -30 g/hl	3.69	5.34
Microstab ML -45 g/hl	3.65	5.44
Microstab ML -60 g/hl	3.63	5.58

Change of total acidity and pH of a Garnacha red wine with pH 3.73 and total acidity of 4.95 g/l after treatment with different doses of Microstab ML. Treatments carried out on wine of the Garnacha variety. Harvest 2021



# **STORAGE**

Store in the original container in a cool, dry, odour-free place.

Once opened, use as soon as possible.

Best before: within 2 years after packaging.

## RGSEAA: 31.00391/CR

This product complies with the International Oenological Codex and with Regulation (EU) 2022/68.