



Improvement of the microbiological stability of musts and wines

# LACTIC BACTERIA POPULATION (UFC/ml)

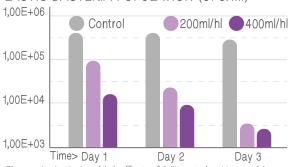
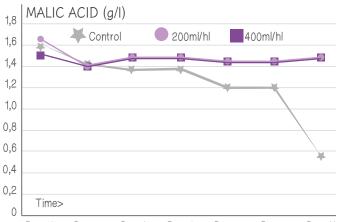
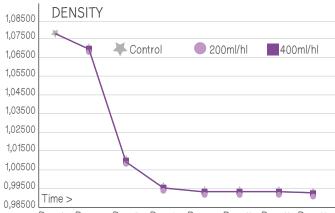


Figure 1. Antimicrobial effect of Microstab pH on white must with a population of 10<sup>6</sup> cfu/ml of Oenoccocus oeni (pH 3.86; total SO<sub>2</sub>: 21 mg/l; free SO<sub>2</sub>: 2 mg/l; probable alcoholic strength (%): 11.07; gluc+fruc: 207 g/l; malic acid: 1.60 g/; lactic acid: 0.11 g/l).



Day 0 Day 3 Day 6 Day 7 Day 8 Day 9 Day 11 Figure 1. Antimicrobial effect of Microstab pH on white must with a population of 10<sup>6</sup> cfu/ml of Oenoccocus oeni (pH 3.86; total SO<sub>2</sub>: 21 mg/l; free SO<sub>2</sub>: 2 mg/l; probable alcoholic strength (%): 11.07; gluc+fruc: 207 g/l; malic acid: 1.60 g/; lactic acid: 0.11 g/l).



Day 1 Day 3 Day 7 Day 8 Day 9 Day 10 Day 11 Day 14 Figure 2. Inhibition of malolactic fermentation (monitoring of malic acid content over time) after adding Microstab pH to white must with a population of 10<sup>6</sup> cfu/ml of Oenoccocus oeni (pH 3.86; total SO<sub>2</sub>: 21 mg/l; free SO<sub>2</sub>: 2 mg/l; probable alcoholic strength (%): 11.07; gluc+fruc: 207 g/l; malic acid: 1.60 g/; lactic acid: 0.11 g/l).

# **CHARACTERISTICS**

**Microstab pH** is an antimicrobial stabilizer that limits development of undesirable micro-organism populations. It allows users to:

- •Control malolactic fermentation. It can be used in white and rosé musts to delay or inhibit malolactic fermentation without affecting normal development of alcoholic fermentation.
- Reduce the negative sensory impact of undesirable microbial activity (volatile acidity, biogenic amines and volatile phenols).
- •Reduce SO<sub>2</sub> levels during winemaking thanks to its powerful antimicrobial properties.

## **APPLICATION**

- During harvesting, as an antimicrobial agent with must-acidifying capacity.
- •In musts and wines to limit the development of polluting flora. Its antimicrobial effect reduces sulphur dioxide dosage.

### **COMPOSITION**

Liquid formula based on chitosan of fungal origin, L-(+)-tartaric acid (E-334).

#### **DOSAGE**

Must and wine 200-400 ml/hl

Doses of 200 ml/hl increased  $\approx 1$  g/l total acidity

Maximum legally permitted dose: 400 ml/hl

# INSTRUCTIONS FOR USE

## When applied to grapes:

Add all the solution to the fruit in the receiving hopper, either after destemming and crushing or when filling the press or macerating vessel.

#### When used with must or wine:

Add all the solution to the entire volume of must or wine to be treated and stir thoroughly.

Adding the preparation with a metering pump ensures uniform product distribution.



## PHYSICAL APPEARANCE

Amber liquid.

# **PACKAGING**

24-kg or 1200-kg packs.

## PHYSICO-CHEMICAL AND MICROBIOLOGICAL PROPERTIES

L-tartaric acid (%)	39-41
рН	< 1
Density (g/ml)	1.17-1.19
Turbidity (NTU)	<40
Heavy metals (mg/kg)	
Pb (mg/kg)	< 1
As (mg/kg)	< 1
Hg (mg/kg)	< 0,1
Cd (mg/kg)	< 1
Microbiological specifications	
Total count (CFU/g)	< 10 <sup>3</sup>
E. coli (CFU/g)	< 10
Salmonella (CFU/25 g)	Not present

## **STORAGE**

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

Once open, use as soon as possible.

Best before: within 2 years of packaging.

## RGSEAA: 31.00391/CR

This product complies with the International Oenological Codex and with Regulation (EC) No 606/2009.