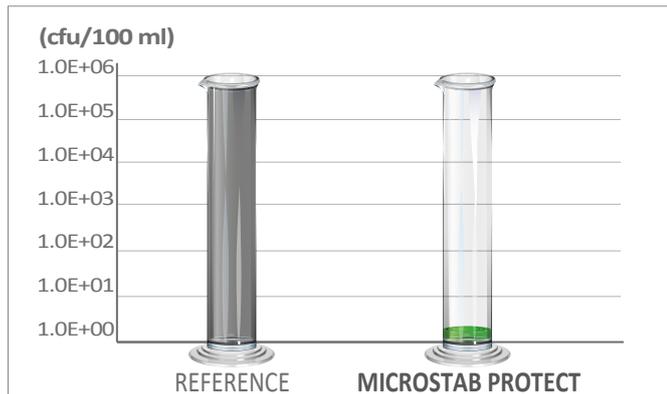


MICROSTAB PROTECT

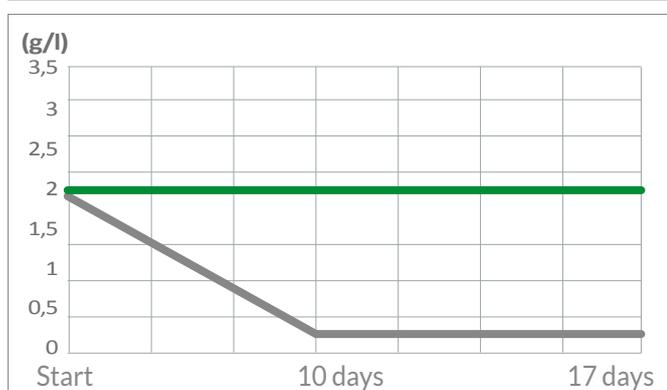
Reduction of microorganisms and antioxidant protection.

Suitable for organic wines.



Graph 1.- Effect against *Brettanomyces* yeasts of treatment with **Microstab PROTECT** (dose 20 g/hl) after 10 days of contact, on red wine (% v/v 14.35, pH 3.71, free SO₂ free 3 mg/l, total SO₂ total 39 mg/l, gluc+fruc 0.48 g/l).

The new formulation has a high antimicrobial efficacy against Brettanomyces, substantially reducing or eliminating populations of this contaminating yeast.



Graph 2.- Evolution of malic acid content (g/l) when treated with **Microstab PROTECT** (dose 20 g/hl) after 17 days of contact, on red wine, % v/v 14.63, pH 3.71, free SO₂ 0 mg/l, total SO₂ total 2 mg/l, malic acid 2.31 g/l, lactic acid 0.23

Delayed of the start of malolactic fermentation thanks to the use of Microstab PROTECT (the REFERENCE wine completes the malolactic fermentation after 10 days from the start of the study).

This formulation comes from the research results of the WINEBALANCE project "Improving the colloidal structure of wine: New bioactive tools of interest".



INFORMATION

A specific mixture which combines antimicrobial and antioxidant properties, meaning it can be used as an effective tool to help reduce the levels of sulfur in wine making.

- Substantially reduces or eliminates *Brettanomyces* populations, decreasing the risk of alterations due to the presence of this contaminating yeast. It effectively reduces the populations of *Brettanomyces* and lactic bacteria. Like any other antimicrobial, the reduction of populations depends on the initial microbiological load.
- Antioxidant effect and oxidation protector. Natural antioxidant effect, protects the aromatic fraction and limits the browning of wines.
- Inactive oxidation catalysts. Reduces activity of oxidase enzymes, responsible for the oxidation of phenols.
- Reduces the metal content (Fe and Cu).

APPLICATION

Treatment of fermentation stoppages in order to avoid the consumption of must sugars by lactic acid bacteria (lactic stinging) and decrease the risks of increased volatile acidity.

End of alcoholic fermentation to control the microbial load, protection of flavors and a delay in the evolution of wines.

Control of malolactic fermentation (MLF): delays or inhibits malolactic fermentation. Once decanted, malolactic fermentation is possible following the inoculation of lactic bacteria.

- » Delay of MLF after alcoholic fermentation in red wine production allowing work with microoxygenation.
- » Inhibition of the malolactic fermentation in the production of white wines and young red wines, to preserve acidity.

Microbiological stability of the bacterial population in red wines after malolactic fermentation, reducing the dose of SO₂ used during the storage of wine.

Ageing in lees and finished wine. For control of the microbial load, protection of aromas and delay in the evolution of wines.

Clarification of musts and wines.

Reduction of metal content (Fe and Cu).

COMPOSITION

Chitosan of fungal origin (*Aspergillus Níger*). Inactive yeast (*Saccharomyces cerevisiae*) with high antioxidant power (glutathione). Gallic tannin (*Caesalpinia spinosa*).

DOSAGE

Must or vine 10-30 g/hl

Maximum legal dose:

- Clarifying effect (must/wine): 200g/hl
- Reduction of heavy metal content (wine): 200g/hl
- Reduction of possible contaminants, ochratoxin A (wine): 1000g/hl
- Antimicrobial activity (wine): 20 g/hl.

DIRECTIONS

1. Resuspend in 5 or 10 times its weight in water or wine, shaking gently.
2. Incorporate into the total volume of the wine, ensuring homogenization. Ensure a wine temperature > 12°C.
3. Decant after ten days of treatment. In the case of barrel application, it can be kept in contact with the wine until it is emptied, in which case it is advisable not to stir the bottom.

PHYSICAL APPEARANCE

Fine cream-colored powder.

PRESENTATION

1 kg Container.

PHYSICOCHEMICAL PROPERTIES

EP 889 (REV.1)

Humidity (%)	< 10
pH	6.5-8.5
Microbiological specifications	
Total count (CFU/g)	< 1000
<i>E. coli</i> (CFU/g)	< 10
<i>Salmonella</i> (CFU/25g)	Absence
Total coliforms (CFU/g)	< 100

PRESERVATION

Store in the original container in a cool, dry place, free from odors.

Once opened, it should be used as soon as possible.

Best before: 3 years after packaging.

RGSEAA: 31.00391/CR

Product in compliance with the International Oenological Codex and Regulation (EU) 2019/934