

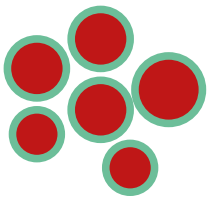
MAXIGUM PLUS

Highly Effective, Easy-to-Use Stabilizer

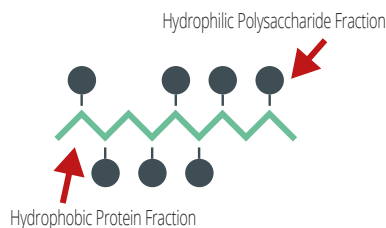
Gum Arabic has been used in winemaking for many years due to its ability to prevent turbidity and the formation of precipitates caused by unstable color colloids. In recent years, progress has been made in understanding gum Arabic's mechanisms of action and in the improvement of production processes, providing products that are even more suitable for winemaking.

GUM ARABIC COLOR STABILIZATION MECHANISM

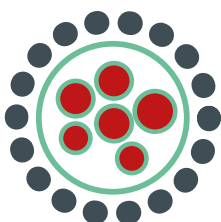
UNSTABLE COLOR
(Hydrophobic Aggregate)



GUM ARABIC



SOLUBLE COMPLEX
GUM ARABIC - COLOR



GUM ARABIC: NATURAL POLYSACCHARIDE

Gum Arabic is composed of a complex mix of glycoproteins and polysaccharides rich in galactose and arabinose and is exuded by bushes of the *Acacia senegal* and *Acacia seyal* species. The exuded gum, which is produced to repair purposeful cuts to the trunk and branches, is collected, dried, liberated of impurities and selected according to its color. These gum lumps are the raw material subsequently used to produce gum Arabic intended for use in winemaking and the food industry.

HOW DOES GUM ARABIC STABILIZE COLOR?

Gum Arabic interacts with wine components via mechanisms linked with its molecular structure, composed of a hydrophilic polysaccharide part and a hydrophobic protein part. Through chemical attraction, the protein fraction binds with unstable color matter to form hydrophobic aggregates that are not very soluble. The polysaccharide part, on the other hand, creates a hydrophilic layer around these aggregates, hence increasing their solubility.

WHY IS VEREK GUM MORE EFFECTIVE FOR COLOR STABILIZATION?

Among the gums used in winemaking, Verek gum has the most abundant protein fraction; therefore, it is more effective in its interaction with unstable color matter.

Verek gum also has a polysaccharide fraction with large dimensions giving it high stabilization capacity while, at the same time, making it harder to filter. The application of a hydrolysis process, even a partial one, can notably improve the filterability of the gum but it will be less effective.

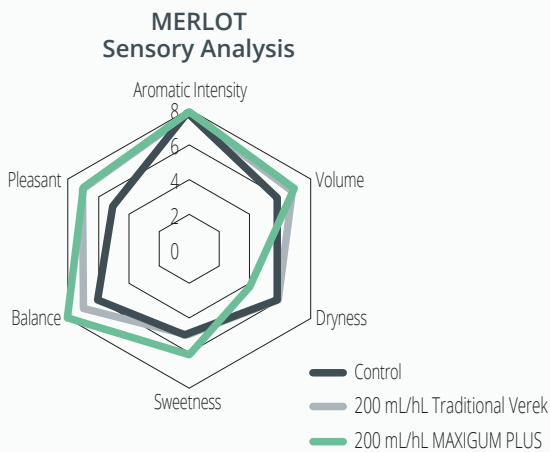
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WHAT IS MAXIGUM PLUS?

Maxigum® Plus is a stabilizing agent made of Verek Gum Arabic and mannoproteins. It was created to ensure effective color stabilization in a simple and safe manner.

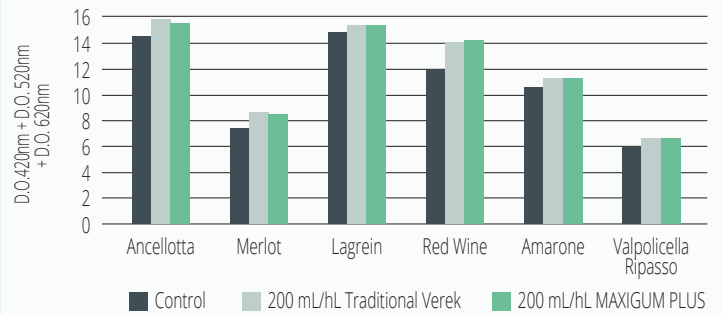
The effectiveness and ease-of-use of Maxigum Plus are due to its production process which includes, after solubilization and purification in conditions that maintain its original dimensions, a filtration step with an innovative system that modifies the three-dimensional structure, hence making it microfilterable. Mannoproteins further increase the stabilizing effect of the gum and contribute to the sensory balance of wine.



SENSORY EFFECT

In wines characterized by dry and astringent tannins, Maxigum Plus can restore balance by providing smoothness and softening dry sensations.

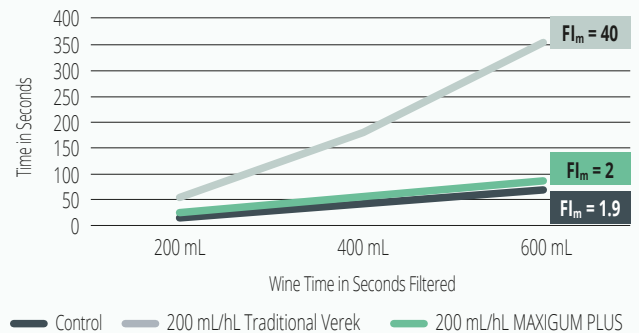
Color Stability Test 24 hours at -4° (25°F)



EFFECTIVE STABILIZATION

Maxigum Plus has a high stabilization ability due to the high molecular weight of the gum and synergic effect of the mannoproteins.

Red Wine Filtration Test



FILTERABILITY

Maxigum Plus can be used before microfiltration without the dosage and filtration porosity limits necessary for other traditional Verek gums.

enartis

Inspiring innovation.

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