

# PLANTIS PQ

## Plant Protein Boosted by Chitosan

enartis

### Traditional Fining vs. Enartis Innovation

Plant proteins obtained from peas or potatoes are plant-based alternatives to traditional animal proteins. They are good at improving juice and wine clarity, removing polyphenols, reducing astringency and increasing resistance to oxidation.

**Plantis PQ** is a new, allergen-free and vegan-friendly fining agent for the clarification and stabilization of wine. It is made from potato proteins and enhanced with Enartis chitosan.

Two things make this product unique:

- Potato protein and chitosan hydrolysis level are optimized for the best clarification performance.
- The high charge density.

These unique features make Plantis PQ effective for:

#### 01 Improving wine clarity

#### 02 Removing oxidized and easily oxidizable phenolic substances

#### 03 Improving wine sensory quality

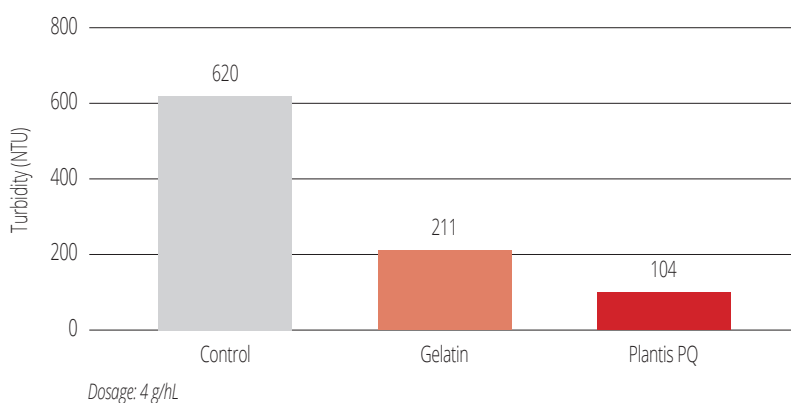
The main reasons to perform wine fining treatments are clarification, stabilization and to remove phenolic compounds imparting unwanted sensory characteristics. These operations normally rely on the use of animal proteins, such as casein, gelatin, egg albumin, isinglass and fish gelatin. However, due to the allergenic potential of animal proteins, there is increasing interest in developing alternative solutions using fining proteins extracted from plants.

## 01

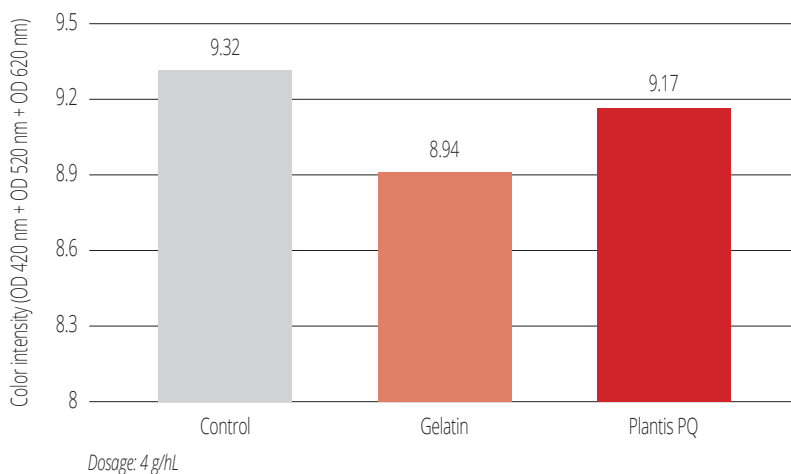
### IMPROVING CLARITY

Compared to traditional fining agents, Plantis PQ improves clarity while respecting wine color. The use of Plantis PQ helps preserve young color, increases aromatic freshness and improves wine longevity.

#### PLANTIS PQ ASSURES FAST CLARIFICATION (wine turbidity after 24 hours treatment)



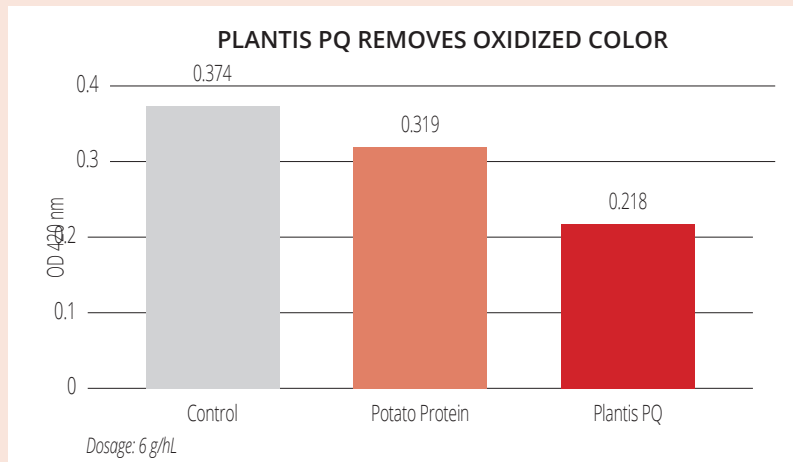
#### PLANTIS PQ RESPECTS WINE COLOR



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## 02

### IMPROVING WINE RESISTANCE TO OXIDATION

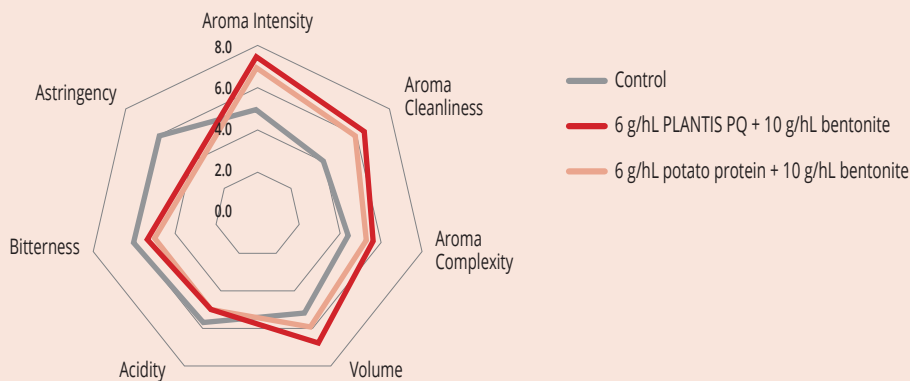
Compared to pure potato protein, Plantis PQ is more effective in removing oxidized and oxidizable phenolic compounds. Activated chitosan is known for its ability to remove catechins (the main substrate of wine oxidation) and pro-oxidant metals such as iron and copper. Potato protein is effective in removing oxidized compounds; therefore, the combination of the two fining agents is effective for restoring color and improving wine resistance to oxidation.

## 03

### SENSORY EFFECT

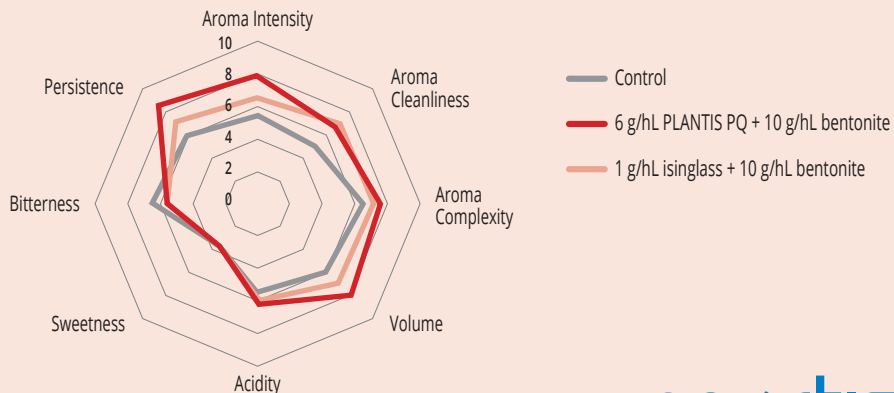
#### RED WINE

Plantis PQ removes astringent tannins while respecting balance and structure. When compared to pure potato protein, Plantis PQ improves aromatic cleanliness and intensity, increases the perception of volume and reduces bitterness.



#### WHITE WINE

It is known that isinglass is the best fining agent to eliminate bitterness. Plantis PQ has a similar effect but is more respectful of aroma intensity and persistence and increases the perception of volume.



**enartis**

Inspiring innovation.

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