

WINE FINING

for tartrate stabilization with colloids

Before using colloids for tartrate stabilization, protein and color stability must be assured with an appropriate fining strategy. Removal of these positively charged compounds prevents their reaction with negatively charged tartrate stabilizing colloids and the consequent haziness and drop of filterability.

WINE REQUIREMENTS FOR STABILIZATION WITH COLLOIDS

01

Protein stability

WHITE AND ROSÉ WINES

Metatartaric acid, carboxy methylcellulose (CMC) and potassium polyaspartate (KPA) react with unstable wine proteins. Before using one of these colloids, it is imperative to check wine protein stability and be sure wine is well below the maximum stability limit, whatever the analytical method used.

02

Color stability

RED WINE

Tartrate stabilizing colloids do not have any stabilizing effect on color. Unstable color must be removed with a fining or stabilized with gum Arabic addition.

03

Filterability

WHITE, RED AND ROSÉ WINE

Metatartaric acid and KPA do not change wine filterability, while mannoproteins and CMC can decrease it. Also gum Arabic used for color stabilization can have an impact. Good fining allows for the removal of solids and compounds that naturally affect wine filterability and make wine suitable for the use of stabilizing colloids.

CLARIL ZW

Allergen free, vegan fining agent containing a highly effective deproteinizing bentonite and plant protein enhanced with chitosan.

EFFECT ON PROTEIN STABILITY

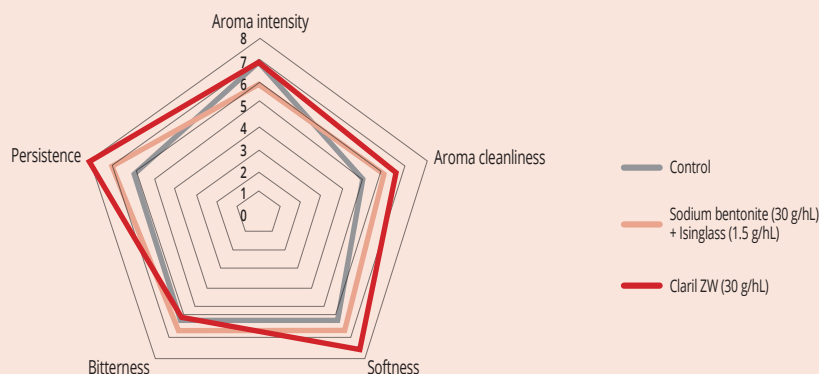
CLARIL ZW's dosage can be up to 40% lower than standard bentonite. It improves wine clarity quickly and produces compact lees.

	PROTEIN STABILITY TEST* BEFORE FINING Δ NTU	PRODUCT	DOSAGE (g/hL)	PROTEIN STABILITY TEST AFTER FINING Δ NTU
WINE A	139	SODIUM BENTONITE	140	0.29
		CLARIL ZW	90	0.27
WINE B	7.7	SODIUM BENTONITE	50	0.26
		CLARIL ZW	30	0.25
WINE C	17	SODIUM BENTONITE	80	0.34
		CLARIL ZW	60	0.37

*Protein stability test: wine sample heated to 80°C for 2 hours. Wine is protein stable when Δ NTU is lower than 2.

SENSORY EFFECT

CLARIL ZW preserves wine aromatics, improves aroma cleanliness by decreasing the perception of sulfur off-flavors and respects wine balance and structure.



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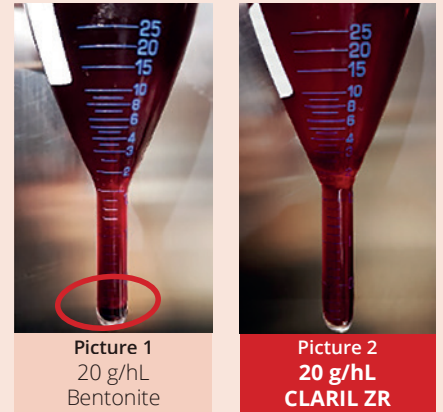
CLARIL ZR

Allergen free, vegan fining agent made from a bentonite very effective in removing unstable color compounds and plant protein enhanced with chitosan.

EFFECT ON COLOR STABILITY

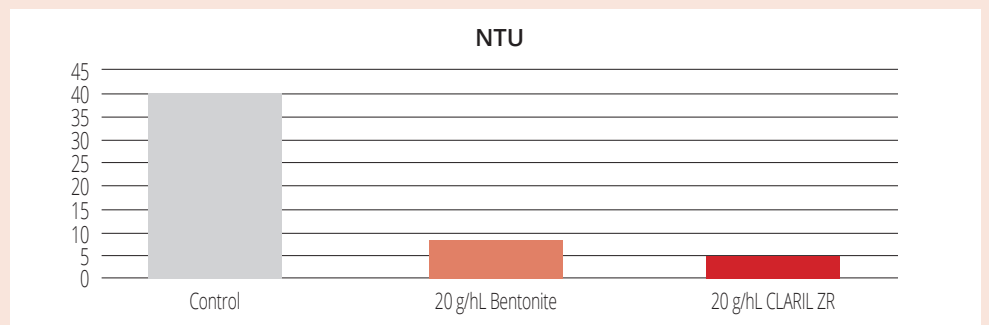
Claril ZR can be used to reduce the instability of color unstable wines and to prepare them for complete and long-lasting stabilization with the Zenith range, potassium polyaspartate liquid solutions for wine tartrate stabilization.

Picture 1 - Picture 2: Color stability test (24 hours at -4°C): the wine treated with 20 g/hL of Claril ZR is fully color stable while the wine treated with 20 g/hL of bentonite still contains unstable color compounds.



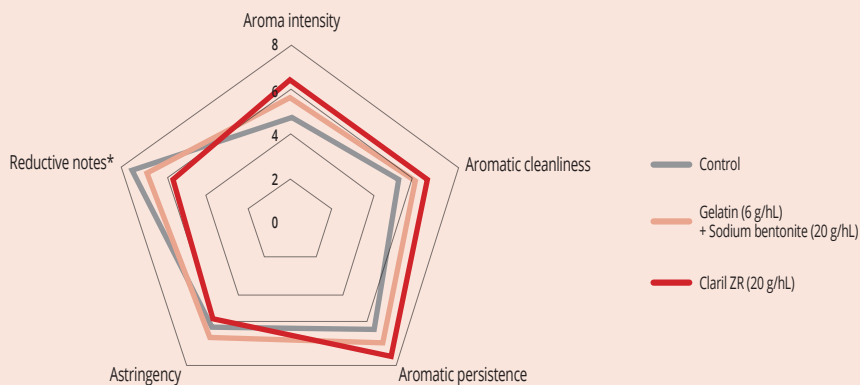
EFFECT ON WINE CLARIFICATION

Claril ZR removes colloids and suspended solids with resulting reduction in turbidity. In comparison with the use of bentonite, Claril ZR ensures faster and more effective clarification, obtaining a clearer wine.



SENSORY EFFECT (REDUCTION OF OFF-FLAVORS)

Treatment with Claril ZR reduces the perception of wine off-flavors, such as sulfur compounds and volatile phenols, and improves aromatic cleanliness.



* rotten egg, burnt rubber, skunky, burnt match, asparagus, onion or garlic.

enartis

Inspiring innovation.

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