

Sunburned White Grape Protocol

PROBLEM(S)	OBJECTIVE
Sunburned/Raisined Fruit	To avoid potential sensory defects associated with sunburned white grapes.

OVERVIEW:

Sunburned grapes typically have thicker cuticles, more protein, lower yield, and higher phenolics. This usually produces wines with less yield, more bitterness and higher oxidative potential. Increasing yield and pressing volume is required, but care should be taken to not over extract phenolics. Higher pectin levels in sunburned fruit means a strong pectinase is required for settling and clarification. Additionally, heavy fining is required to remove oxidative potential and bitterness. Sunburned fruit is also low in glutathione and high in protein, which can be handled with fermentation additions.

WINEMAKING STAGE	OBJECTIVE	ENARTIS RECOMMENDATIONS	DOSAGE
Grape Reception/Pressing	Increase yield, improve protein stability	EnartisZym Arom MP is a pectinase enzyme with side protease activities. This increases yield and aromatic precursors from the fruit, while also improving protein stabilization. Separate press fractions, if possible.	30 g/ton
Post-Pressing	De-pectinize and settle	EnartisZym RS is a rapid depectinizing enzyme that is required to ensure adequate settling and clarification. 2-4 hours required for settling.	4 mL/hL
Juice Fining/Clarification	Remove oxidative precursors and bitterness	Claril AF is a fining blend that removes smaller catechins and phenolics, improves oxidative resistance of juice and reduces bitterness.	50 g/hL
Inoculation	Enhance aromatics	EnartisFerm ES 181 is a yeast that produces high amounts of thiols and other aromatics. This helps balance wine with excessive amounts of terpenes as is common in sunburned fruit. Proper nutrition is required. Using Nutriferm Ultra will ensure yeast is able to complete the fermentation.	30 g/hL for both
1/3 Fermentation Progression	Enhance mouthfeel and preserve aromatics	EnartisPro Blanco is an inactivated yeast that will help balance the mouthfeel of sunburned fruit, as well as provide antioxidant peptides that can protect and enhance beneficial aromas.	30 g/hL
Post-Fermentation	Balance mouthfeel	Depending on the severity of burn, some additional fining may be required to correct any bitterness or excessive phenolics remaining in the wine. Perform bench trials with Claril AF and Plantis AF-Q to determine which treatment is best. Additionally, excessive protein levels can be removed with Claril ZW , a fining blend that is highly effective for wines with high phenolics.	Bench trial for dosage

The above is achieved to the best of our knowledge and experience.

The industrial application of the advice provided does not imply any responsibility on the part of our company.