

WINEMAKING GUIDELINES

Aromatic Whites & Rosés Thiols

<u>Main grapes varieties rich in thiolic compounds</u>: Sauvignon Blanc, Grenache Blanc, Colombard, Petit Manseng, Gros Manseng, Vermentino and Ugni Blanc.

Main aromas associated with thiols: grapefruit, tropical, citrus, passion fruit, box tree, cassis and black currant.

How to optimize thiol expression during winemaking?

- Promote extraction of aromatic compounds located in skin with skin contact and extraction enzymes
- Express aromatic precursors by using a yeast with ß-lyase activity
- Enhance complexity and aroma production by increasing the aromatic precursor content of must
- Reduce bentonite usage to limit stripping of wine aroma: improve protein stability at early stages of the winemaking process
- Protect aromas from oxidation throughout the entire winemaking process

WINEMAKING STAGE	ENOLOGICAL PRODUCT	ENARTIS RECOMMENDATION	DOSE
Harvest/ Vineyard	Antioxidant	<u>AST</u> : Blend of ascorbic acid, gallic tannins and SO_2 for complete antioxidant protection. 100ppm of AST = 28 ppm SO_2 .	100 ppm
Crush	Extraction Enzyme	<u>Enartis Zym Arom MP</u> : Pectinase, cellulase, hemicellulase, and protease activity. Improves extraction of aromatic compounds. Increases free run yield. Helps clarification and protein stability.	20-40 g/ton
Use inert gas or dry ice to limit oxygen contact			
Gentle press cycle –Limit press rotation – Separate press fractions			
Recommended analysis: Brix, pH, TA, YAN, Malic Acid, pH and Acid Adjustment Panel			1
Settling	Fining Agent	To prevent and correct oxidative characters, remove phenols and help clarification, use Enartis Claril SP : Blend of bentonite, PVPP, potassium caseinate and silica.	30-50 g/hL
Recommended turbidity ~ 150-200 NTU			
Inoculation	Nutrients	Nutriferm Arom Plus provides essential nutrients for the proper yeast development: amino acids, vitamins and mineral salts and aromatic precursors to enhance fermentation aromas.	30-40 g/hL
	Yeast (choose one)	Enartis Ferm ES181: S.cerevisiae with ß-lyase activity. Increases varietal aromatic expression. White fruit, tropical fruit, grapefruit and passion fruit aromas. Enartis Ferm Q Citrus: S. cerevisiae with ß-lyase and ß-glycosidase activities. Increases varietal aroma expression and produces secondary aromas. White fruit, tropical fruit, orange peel and citrus blossom aromas. Enartis Ferm Q9: S. cerevisiae with ß-lyase. New Zealand Sauvignon Blanc style wine, with noble green, flinty and gun powder notes. Increases the perception of minerality.	20 g/hL
	Polysaccha- rides	<u>Enartis Pro FT</u> : PVI-PVP and yeast cell walls rich in soluble mannoprotein. Protects against oxidation by chelating heavy metals, catalyst of oxidation reactions. Improves mouthfeel and volume sensation and promotes varietal aroma synthesis.	10-30 g/hL
Fermentation temperature: 17-19°C (62-67°)			
1/3 Fermentation	Yeast Nutrients	<u>Nutriferm Advance</u> : Organic and inorganic nitrogen, yeast cell walls rich in sterols and fatty acids and cellulose. Helps yeast with stress resistance, detoxifies wine, ensures complete fermentation and reduces production of H_2S .	30-50 g/hL
	Oxygen	Enartis MicroOx or pump-over.	10 mg/L
	Tannin	<u>Enartis Tan Citrus</u> : Blend of gallic and condensed tannins with aromatic precursors. Contributes to floral, orange blossom, grapefruit and lemon notes.	3-7 g/hL
	Protein	Bentolit Super: Activated sodium bentonite. If grapes have historically high protein instability,	
	Stability	treatment with bentonite at juice settling and during AF is recommended.	
Recommended analysis: Alcohol, Residual Sugar, pH, TA, Malic Acid, Microscan			
After Fermentation	Antioxidant Protection	<u>Enartis Stab SLI</u> (active lees, PVPP and untoasted tannins) to consume dissolved oxygen, extend wine shelf-life and protect against oxidation.	20-30 g/hL
	Antimicrobial	<u>Enartis Stab Micro</u> : Pre-activated chitosan. Removes spoilage microbes such as Brettanomyces, Oenococcus, Lactobacillus, Pediococcus, Acetobacter and Zygosaccharomyces.	3-5 g/hL

