



## TECHNICAL NEWSLETTER

### WINEMAKING GUIDELINES: ROSÉ WINES

Rosé wines are defined by their 'pink' color and their simplicity, elegance and freshness. The production of rosés is delicate and requires controlled winemaking from harvest through bottling. Whatever the wine style, some steps in rosé wine production are critical:

#### Harvest for Rosé

Start planning for making rosé wines at the vineyard and base picking decisions on the balance between acidity and sugar. Healthy fruit and early acid adjustment is highly recommended. To help winemakers take the guesswork out of pre-fermentation acid additions, Vinquiry Laboratories by Enartis USA offers the **Acid and pH Management for Juice Panel** which evaluates the final pH of wine post fermentation considering different tartaric acid additions.

#### Protection against Oxidation

Enzymatic reactions are mainly responsible for oxidation in juice, causing loss of polyphenols, browning, production of vegetal characters and loss of varietal aromas.

- Work at cold temperatures for all pre-fermentation steps to slow down oxidation reactions
- Reduce oxygen contact by working fast and under inert gas
- Use complete antioxidant protection on grapes and limit SO<sub>2</sub> use – **AST** (ascorbic acid, SO<sub>2</sub>, gallic tannin)
- Improve color, polysaccharide and aroma extraction, increase free run yield, improve clarification and help protein stability with enzymes - **Enartis Zym Arom MP** (pectinase, hemicellulase and protease)
- Fine oxidation precursors, oxidized molecules and off-aromas in juice if needed - **Clarif SP** (bentonite, PVPP, potassium caseinate and silica)
- Increase antioxidant protection and protect fresh aromas by removing heavy metals, catalyzer of oxidation reactions – **Enartis Pro FT** (mannoprotein rich in sulfur-containing peptides and PVI/PVP)

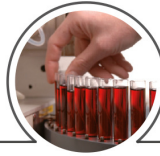
#### A bit more about PVI/PVP

PVI/PVP is an adsorbent polymer (copolymers of vinylimidazole and vinylpyrrolidone) capable of removing heavy metals in wine such as copper (Cu), iron (Fe) and aluminum (Al). Also, PVI/PVP has the ability to bind with phenolic compounds, substrates of oxidative reactions. Wines treated with PVI/PVP are fresher, more aromatic, more balanced, have a lower oxidation potential and improved shelf life.

#### Promote the Synthesis of Fruity, Fresh, Complex and Elegant Aromas

The synthesis and release of aromas happens during fermentation and depends on yeast, yeast nutrition and aromatic precursors.

- Due to their composition, enzymatic activities and metabolism, yeast strains strongly impact the aromatic profile of wine.
- Yeast nutrition is key to optimize the effect yeast, limit off-flavor development and enhance fermentation aroma production. We recommend two nutrient additions:
  - **Nutrifer Arom and Arom Plus:** Amino acids, vitamins and mineral salts at inoculation to improve yeast cell growth, cells resistance to alcohol and performance. High content in aromatic precursors to increase the synthesis of secondary aromas.
  - **Nutrifer Advance:** Ammonium ions, survival factors and detoxifying agents used at 1/3 alcoholic fermentation to ensure complete fermentation, reduce yeast stress and limit H<sub>2</sub>S production.
- **Enartis Tan Citrus and Enartis Tan Red fruit** are specific tannins extracted from fruit tree wood that release nor-isoprenoid and terpenic precursors to enhance the aromatic profile of wine.
- Juice turbidity impacts yeast stress and aroma production; we recommended working with juices between 80-200 NTU.
- Fermentation temperature changes yeast metabolism and enzymatic activities: Low temperatures (12-14°C) promote ester and acetate production, while higher temperatures (16-18°C) increase varietal character expression.



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### Four Common Styles of Rosé

FRUIT DRIVEN ROSÉ	
Recommended Grapes Varieties	Syrah, Zinfandel, Malbec, Petite Syrah, Tempranillo, Cabernet Sauvignon, Merlot
Crusher	AST
	ZYM AROM MP
Maceration	<i>Medium - Saignée</i>
Clarification	CLARIL SP
Temperature	<i>13-15°C (55-59°F)</i>
Inoculation	ENARTIS FERM RED FRUIT
	NUTRIFERM AROM PLUS
	ENARTIS TAN RED FRUIT
1/3 Fermentation	NUTRIFERM ADVANCE
	ENARTIS PRO R

FLORAL ROSÉ	
Recommended Grapes Varieties	Pinot noir, Nebbiolo, Grenache, Cinsault, Carignan, Merlot
Crusher	AST
	ZYM AROM MP
Maceration	<i>Short</i>
Clarification	CLARIL SP
Temperature	<i>16-17°C (60-62°F)</i>
Inoculation	ENARTIS FERM ES FLORAL
	NUTRIFERM AROM
	ENARTIS TAN ELEGANCE
	ENARTIS PRO AROM or PRO FT
1/3 Fermentation	NUTRIFERM ADVANCE

"RESERVE"/RICH ROSÉ	
Crusher	AST
	ZYM AROM MP
Maceration	<i>Medium</i>
Clarification	CLARIL SP
Temperature	<i>16-17°C (60-62°F)</i>
Inoculation	ENARTIS FERM PERLAGE
	NUTRIFERM AROM PLUS
	INCANTO NC WHITE
1/3 Fermentation	NUTRIFERM ADVANCE
	ENARTIS PRO UNO

PROVENÇAL/THIOLIC ROSÉ	
Recommended Grapes Varieties	Grenache, Mourvèdre, Syrah, Sangiovese, Cabernet Sauvignon
Crusher	AST
	ZYM AROM MP
Maceration	<i>Short</i>
Clarification	CLARIL SP
Temperature	<i>16-17°C (60-62°F)</i>
Inoculation	ENARTIS FERM Q CITRUS
	NUTRIFERM AROM
	ENARTIS TAN CITRUS
	ENARTIS PRO BLANCO or PRO FT
1/3 Fermentation	NUTRIFERM ADVANCE



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### Enartis Range of Products

#### At the Crusher

**AST:** Ascorbic acid, gallic tannins and potassium metabisulfite. 100 ppm of AST = 28 ppm SO<sub>2</sub>.

**Enartis Zym Arom MP:** Pectinase, cellulase, hemicellulase, and protease activity.

**Enartis Claril SP:** Blend of bentonite, PVPP, potassium caseinate and silica.

#### Yeast

**Enartis Ferm Q Citrus** produces wines with tropical fruit, lime, lemon, grapefruit, orange peel and citrus blossom notes.

**Enartis Ferm ES Floral** produces elegant wines with intense floral aromas such as white roses, citrus blossom and fruity notes.

**Enartis Ferm Red Fruit** increases varietal aroma expression and promotes red fruit, berries, cherry notes and spicy aromas.

**Enartis Ferm Perlage** produces rich, clean and elegant wines that express grape characteristics.

#### Yeast Nutrition

**Nutriform Arom** provides essential nutrients for the proper yeast development: amino acids, vitamins and mineral salts. Supplies aromatic precursors for the synthesis of secondary aromas.

**Nutriform Arom Plus** provides essential nutrients for proper yeast development such as amino acids, vitamins and mineral salts. Supplies a high content of aromatic precursors for the synthesis of secondary aromas.

**Nutriform Advance:** 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 H<sub>2</sub>S production.

#### Fermentation Tannins

**Enartis Tan Red Fruit:** blend of condensed tannins extracted from red fruit trees wood (nor-isoprenoid precursors). It enhances red fruit and berry aroma production.

**Enartis Tan Citrus:** blend of tannins extracted from citrus tree wood with terpenic aromatic precursors. It contributes to floral, orange blossom, grapefruit and lemon notes.

**Enartis Tan Elegance:** condensed tannins from white grape skins. It protects against oxidation, balances mouthfeel, gives length and enhances floral notes.

**Incanto NC White:** soluble mixture of untoasted oak tannin, acacia tannins and yeast polysaccharides. It reduces off-flavors and green characters, protects against oxidation, prevents reduction and increases wine volume.

#### Fermentation Polysaccharides

**Enartis Pro R:** pure yeast derivative. It releases mannoproteins that balance mid-palate and increase length sensation.

**Enartis Pro Blanco:** yeast cell wall polysaccharides rich in sulfur-containing peptides. Enhances thiol production, balances mid-palate and improves length sensation.

**Enartis Pro FT:** blend of yeast cell wall polysaccharides rich in sulfur-containing peptides and PVI/PVP. It enhances thiol production, balances mid-palate and protects against oxidation.

For more information, Please call (707) 838-6312.