

ENARTIS NEWS

SMALL CHANGES NOW CAN PROVIDE BIG RESULTS LATER

Once fermentations are finished, it's time to evaluate wine quality and decide the destination of each wine: for early release or long-term ageing, fresh and fruity or oak-aged style. This is also the moment when various faults become evident. In this phase, it is possible to adopt easy, time-saving and quality solutions that re-direct wine to the right track.

Let's consider 4 common situations:

- Fresh and easy-to-drink wine
- Wine destined for long-term ageing
- Oak-aged wine style for early release
- Wine with faults

Case	FRESH, EASY-TO-DRINK WINE	LONG-TERM AGED WINE	OAK-AGED STYLE FOR EARLY RELEASE	PRESENCE OF FAULTS
Main Challenge	<ul style="list-style-type: none"> • Preserve freshness and keep consistent quality from the first to final bottling. • Avoid unwanted MLF. 	<ul style="list-style-type: none"> • Protect the wine long-term without exceeding the SO₂ max legal limit. • Prevent microbial spoilage. • Optimize the use of barrels. 	<ul style="list-style-type: none"> • Accelerate wine maturation. 	<ul style="list-style-type: none"> • Treat the issue without negatively affecting wine quality.
Solutions	<ul style="list-style-type: none"> • Use tannins, fine lees or fine lees alternatives as antioxidant and to maintain a low redox potential. • Control wine microbial spoilage with chitosan. 	<ul style="list-style-type: none"> • Use tannins, fine lees or fine lees alternatives as antioxidant. • Control wine microorganisms with chitosan. • Use oak tannins to prolong the life span of used barrels. 	<ul style="list-style-type: none"> • Increase wine complexity and roundness with fine lees or fine lees alternatives. • Provide oak aroma with chips. • Increase wine structure with toasted oak tannins. 	<ul style="list-style-type: none"> • Adopt a mild solution adding yeast polysaccharides and tannins.

FRESH, EASY-TO-DRINK WINE

With this kind of wine, the biggest challenge is to guarantee the fresh, young character from the first bottling to the last given that this can take place over the span of one year after harvest. The main technical objectives of the maturation phase are:

Slow down ageing of aroma and color. This means protecting wine from oxidation. Besides inert gasses and SO₂, there are other effective, healthier and reasonable solutions:

- Fine lees, from the fermentation or added as inactivated yeast, can consume dissolved oxygen and maintain a low redox potential.
- Tannins can be used as antioxidant alternatives to SO₂. Gallic tannins and some untoasted oak tannins are very effective without impacting wine sensory quality.

Prevent microbial contamination. Unwanted malolactic fermentation onset or the growth of spoilage microorganisms can lead to a loss of freshness or the production of off-flavors that can mask the fruit characters of wine. SO₂ additions, low temperatures, filtration and sanitization of tanks and equipment help to minimize the risk of contamination.

- Chitosan is a new tool that can be used to control a wide spectrum of microorganisms. It is vegan and allergen free and can be used to partially or completely replace SO₂.

Enartis solutions for preventing oxidation and microbial contamination

Objectives	Enartis solution	Composition	Effects
Slow down ageing of aroma and color	Surli Natural	Inactivated yeast	<ul style="list-style-type: none"> • Antioxidant protection • Mouthfeel & softness • Aroma complexity
	EnartisTan Blanc	Gallic tannin	<ul style="list-style-type: none"> • Anti-ageing
	EnartisTan SLI	Ellagic tannin extracted from untoasted American oak	<ul style="list-style-type: none"> • Antioxidant protection • H₂S prevention and correction
Prevent microbial contamination	EnartisStab Micro M	Activated chitosan and yeast hulls rich in chitin-glucans	<ul style="list-style-type: none"> • Antimicrobial • Antioxidant protection (adsorption of copper & iron) • Removal of volatile phenols

WINE DESTINED FOR LONG-TERM AGEING

The main goal of long-term ageing is to get complexity from the development of tertiary aromas and integration of flavors. These are the critical points:

- **SO₂ management.** It is necessary to protect wine without increasing the level of total SO₂ close to the maximum legal limit. Storage on fine lees, the use of tannins with antioxidant effects and the antimicrobial effect of chitosan help to reduce the addition of SO₂.

- **Preventing spoilage microorganism contamination,** particularly *Brettanomyces*, is another goal that can be tough to manage, especially in the case of barrel ageing. Before transferring wine to barrels or when cellar temperatures increase in Spring, adding a small amount of chitosan is a good practice.
- **Ageing in used barrels.** After ageing two or three wines, oak's capability of releasing tannins and oak characters is much lower and not sufficient to guarantee the same effect on structure and aromatic complexity. The use of oak tannins can compensate for the lack of oak components.

Enartis oak tannins that can prolong barrels life-span

	ANTIOXIDANT EFFECT	INCREASE OF AROMATIC CLEANLINESS	STRUCTURE	ASTRIGENCY	SOFTNESS	AROMA INTENSITY	AROMA DESCRIPTION
Cœur de Chêne	♦♦	♦♦	♦♦	♦♦	♦♦♦	♦♦♦♦	Vanilla, caramel, spices
Dark Chocolate	♦♦♦	♦♦	♦♦♦	♦	♦♦♦♦	♦♦♦♦♦	Cocoa, toasted hazelnut, vanilla
Elevage	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦	♦♦♦	Caramel, licorice, vanilla
Extra	♦	♦♦	♦♦	♦	♦♦♦♦	♦♦♦♦♦	Vanilla, caramel, cocoa, coffee
Napa	♦♦♦	♦♦	♦♦♦	♦	♦♦♦♦	♦♦♦♦♦	Coconut, caramel, coffee, cocoa
Rich	♦♦	♦♦♦	♦♦	♦♦	♦	♦♦	Toasted wood, coffee, spices
SLI	♦♦♦♦♦	♦♦♦♦	♦♦	♦	♦♦♦♦	♦♦♦♦	Wood, coconut, vanilla
Superoak	♦♦♦	♦♦♦	♦♦	♦	♦♦	♦♦	Vanilla, caramel, hay
Toffee	♦♦♦	♦♦♦	♦♦♦♦	♦♦	♦♦♦	♦♦♦♦	Coffee, caramel, toasted wood
Vanilla	♦♦♦	♦♦♦	♦♦♦♦	♦♦	♦♦♦	♦♦♦♦	Vanilla, coconut, cream

1: low impact; 4 high impact

OAK-AGED STYLE FOR EARLY RELEASE

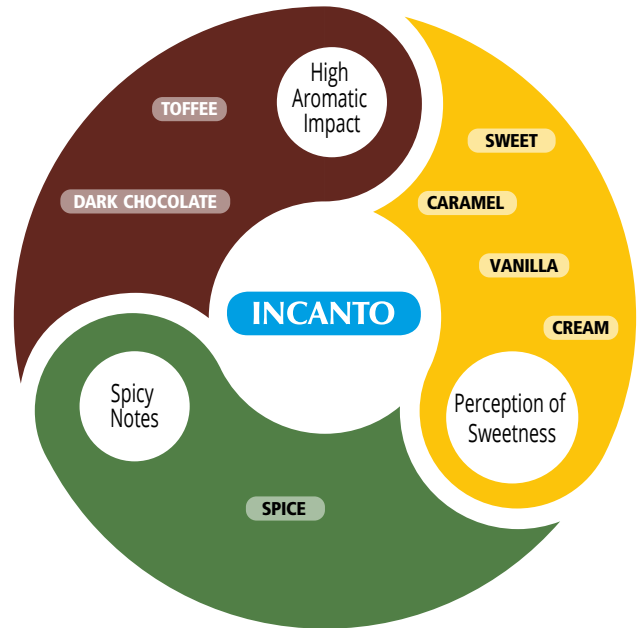
When the objective is to get a complex, oaky aroma with a soft and full body in a short amount of time:

- The addition of inactivated yeast gives the effect of sur lies ageing in just a few weeks- more aromatic complexity, roundness and volume on the palate;
- oak chips can easily modify the oak profile;
- toasted oak tannins complete the effect of chips increasing wine structure and accelerating maturation.

WINE WITH FAULTS

The beginning of maturation is the right time to correct wine imperfections. The principle is always the same: the sooner the better. In a young wine, at the beginning of its maturation period, it is possible to try “mild/softer” corrective treatments and observe their impact over time. If they are not effective, there is enough time to repeat the treatment or try a different strategy. The addition of tannins and polysaccharides is beneficial to correct or minimize defects such as herbaceous aromas, lack of structure, excess astringency, burning sensation, reduction, etc.

Enartis Incanto oak alternatives



Treat imperfections

Reduce bitterness	Surli Natural
Reduce acidity	Surli Round - Surli Natural - EnartisTan Uva
Increase structure	EnartisTan Uva - EnartisTan Elevage - EnartisTan Fruitan - EnartisTan Microx
Reduce astringency	Surli Elevage - Surli Natural - Surli Round
Reduce alcohol burning sensation	Surli Elevage
Minimize reductive notes	EnartisTan Elevage - EnartisTan SLI - EnartisTan Max Nature - EnartisTan Cœur de Chêne - Surli One
Reduce herbaceous notes	Surli Round - EnartisTan Max Nature - EnartisTan Fruitan - EnartisTan Elegance - Surli Elevage