OAK ALTERNATIVES

If properly dosed, the use of oak alternatives improves wine aroma and taste in a way that makes it pleasing to the international and "new" consumers market. Enartis offers a diverse portfolio of oak chips and soluble alternatives to meet all wine needs and expectations. With INCANTO oak alternatives, winemakers have ultimate control over their oak program and can create a unique signature for their brand or label.





Inspiring innovation.

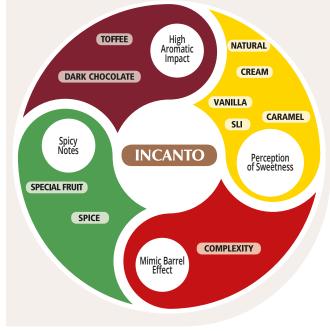
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INCANTO: OUR RANGE OF OAK ALTERNATIVES

Produced from selected wood of French and American oak, INCANTO woods are toasted using a unique and original process that employs a progressive heating scheme which results in a deep and homogenous toast.

INCANTO CHIPS

Size: 2-4 mm Dosage: 1-4 g/L white wines; 1-6 g/L red wines Contact time: minimum of 4 weeks Packaging: 10 kg



INCANTO NATURAL

Composition: French oak, untoasted.

Aroma: enhances fruit, vanilla, coconut, cedar and freshness. Preserves aromatic characteristics of wine.

Taste: increases wine structure, volume and smoothness, and improves balance and finesse.

(Item #35-922-0010)

Available form: chips

10 kg

INCANTO CREAM

Composition: French oak, medium-toasted.

Aroma: vanilla, coconut, butter, cappuccino, licorice.

Taste: increases smoothness, volume and sweetness without imparting excessive tannins.

Available form: chips

10 kg (Item #35-920-0010)

INCANTO VANILLA

Composition: American oak, medium-toasted.

Aroma: vanilla, coconut, Bourbon, honey, tropical fruit, hazelnut, toasted almond, butter.

Taste: increases smoothness, volume and freshness without imparting excessive tannins.

Available form: chips

10 kg (Item #35-925-0010)

INCANTO CARAMEL

Composition: French oak, medium-toasted.

Aroma: caramel, cappuccino, toasted sugar, butter, almond, toasted hazelnut, vanilla, light spice.

Taste: increases smoothness and sweetness.

Available form: chips

10 kg (Item #35-919-0010)

INCANTO SLI

- American oak, untoasted.
- Enhances varietal characteristics and increases freshness and longevity of aromas.
- Increases volume, softness and structure without increasing tannic sensations.
- Increases ageing potential.

10 kg (Item #35-927-0010)

INCANTO SPECIAL FRUIT

Composition: French oak, medium-toasted.

Aroma: spicy, black pepper, caramel, licorice, vanilla, coconut notes. Enhances freshness, fruitiness and complexity.

Taste: increases smoothness, volume and structure without imparting excessive tannins.

Available form: chips

10 kg (Item #35-923-0010)

INCANTO SPICE

- French and American oak, various toast levels.
- Spicy aromas cloves, black pepper, licorice, cocoa, coffee made complex by notes of Bourbon, fruit, dried fruit and coconut.
- Increases softness and structure.

10 kg (Item #35-926-0010)

INCANTO TOFFEE

Composition: French oak, medium-plus toast.

Aroma: café macchiato, toasted bread, toasted almond, hazelnut, vanilla, apricot.

Taste: very smooth, sweet and complex.

Available form: chips

10 kg

(Item #35-924-0010)

INCANTO DARK CHOCOLATE

Composition: French oak, medium plus toast. *Aroma:* dark chocolate, cocoa, black coffee, toasted almond, toasted hazelnut, licorice. *Taste:* increases volume, structure and tannins.

Available form: chips

10 kg (Item #35-921-0010)

INCANTO COMPLEXITY

- French oak, heavy toast.
- Coffee and toast made complex by sweeter aromas of vanilla, coconut and caramel.
- Increases structure, softness and sweetness perception.
- 10 kg (Item #35-928-0010)

INCANTO RANGE	OAK	TOAST	AROMATIC IMPACT	MOUTHFEEL
INCANTO SLI	US	Untoasted	Fresh, neutral	Volume, soft, structure
INCANTO NATURAL	FR	Untoasted	Fruit, fresh, vanilla, coconut	Sweetness, structure, smooth
INCANTO VANILLA	US	Light-medium	Vanilla, coconut, bourbon, butter	Soft, volume, fresh
INCANTO CREAM	FR	Medium	Custard, coconut, cappuccino, dried fruit	Sweetness, soft, volume
INCANTO CARAMEL	FR	Medium	Caramel, toasted hazelnut, butter	Sweetness, smooth
INCANTO SPECIAL FRUIT	FR	Medium Plus	Spice, chocolate, fruit, complexity	Smooth, structure, volume
INCANTO SPICE	FR, US	Various	Black pepper, licorice, complexity	Structure, soft
INCANTO COMPLEXITY	FR	Heavy	Coffee, caramel, vanilla, coconut, complexity	Structure, smooth, sweet
INCANTO TOFFEE	FR	Medium Plus	Caffè macchiato, toasted bread, hazelnut	Smooth, sweet, complex
INCANTO DARK CHOCOLATE	FR	Heavy	Cocoa, black coffee, toasted almond, licorice	Volume, soft

INCANTO NC: THE ALTERNATIVES TO OAK ALTERNATIVES

Why INCANTO NC?

The INCANTO NC products are completely soluble formulations containing just the active molecules that make oak powder application during fermentation interesting:

- Tannins for antioxidant protection, color stabilization and enhancement of the structure.
- Polysaccharides, that increase volume sensations, soften wine tannins, stabilize color and indirectly protect aromas from oxidation.
- Aromatic substances, derived from wood and toasting, that bring aromatic complexity to the final wine.

Application of INCANTO NC:

- increase aromatic complexity
- highlight fruit and floral notes
- prevent reduction during fermentation
- minimize herbaceous notes in underripe grapes
- improve color stabilization
- increase volume and structure

Why use the INCANTO NC range?

INCANTO NC products provide the efficacy of oak powder while offering some advantages:

- precise dosages
- consistent quality
- no burnt or green wood notes
- no solids that can damage the mechanical parts of harvest machinery or render cleaning difficult
- no antimicrobial contamination
- ease of use for the winery staff
- zero loss of color by solids absorption
- low dosage

Since INCANTO NC products only contain the active molecules that can be extracted from wood, dosages are 10 times smaller than the usual oak powder ones. This makes the work of winery staff easier and reduces wastage.



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SENSORY PTIMIZATIO

INCANTO NC

- Inactivated yeast, oak tannin and condensed tannin extracted from exotic wood.
- Mimics the effect of medium-toasted oak powder.
- Enhances oak aromas and aromatic complexity, increases roundness, structure and balance.
- · Improves color stability.

Application: medium-toasted oak; color stability; complexity; volume and structure

Dosage: 10-50 g/hL for red must; 5-15 g/hL for white and rosé juice

2.5 kg (Item #35-916-0002) 10 kg (Item #35-916-0010)

INCANTO NC WHITE

- Inactivated yeast, oak tannin and condensed tannin extracted from exotic wood and gallic tannin.
- Mimics the effect of untoasted oak powder.
- Protects juice from oxidation and prevents the appearance of reductive odors. Additionally, it provides light floral and vanilla notes, increases fresh fruit aromas and enhances softness and volume.

Application: untoasted oak; increase fruit aroma; reduce green notes; increase volume and structure

Dosage: 5-50 g/hL (0.4-4.2 lb/1,000 gal)

2.5 kg	(Item #35-918-0002)
10 kg	(Item #35-918-0010)

INCANTO NC RED

- Oak tannin and inactivated yeast.
- Mimics the effect of medium-plus toasted oak powder.
- Decreases green aromas of unripe grapes, prevents reduction and increases structure, volume and sweetness.
- · Increases color stability.

Application: medium-plus toasted oak; reduce herbaceous notes; complexity; increase volume and structure

Dosage: 10-50 g/hL (0.8-4.2 lb/1,000 gal) for red must

2.5 kg	(Item #35-917-0002)	
10 kg ((Item #35-917-0010)	

INCANTO NC CHERRY

- Inactivated yeast, oak tannin, and condensed tannin extracted from exotic wood.
- Mimics the effects of oak powder.
- Promotes color stabilization, prevents oxidation, enhances fresh red fruit notes and increases wine volume, structure and length.

Application: fruity and spicy aromas; color stability; antioxidant; complexity; increase volume and structure; freshen overripe fruit

Dosage: 5-50 g/hL (0.4-4.2 lb/1,000 gal)

2.5 kg	(ltem #35-913-0002)
10 kg	(Item #35-913-0010)

We have been using INCANTO NC CHERRY for several years now and apart from adding structure, we appreciate the contribution to fruit purity. When used in larger scale wineries, there is a cost saving benefit too, with

no disposal of product later, as with other oak alternatives. Chris Kelly, Winemaker - Escapades - Stellenbosch

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INCANTO NC DARK CHOCOLATE

- Oak tannin and inactivated yeast.
- Mimics the effect of French oak, heavy-toast oak powder.
- Enhances toasted oak aromas and aromatic complexity, increases volume, structure and balance. Masks herbaceous notes from unripe grapes
- Improves color stability.

Application: heavy-toasted oak; reduce herbaceous notes; color stability; complexity; volume and structure

Dosage: 10-50 g/hL (0.8-4.2 lb/1,000 gal)

2.5 kg 10 kg (Item #35-914-0002) (Item #35-914-0010)



I have been using the INCANTO NC range on all red wine fermentation tanks since 2009. Sometimes with oak chips and other times with tannin. INCANTO is, for me, a perfect balance between a tannin and an oak powder. I believe it contributes greatly to mouthfeel, color intensity and stability.

Alicia Rechner, Winemaker at Backsberg Estate Cellars - Paarl, South Africa



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KNOW MORE ABOUT OAK AGEING

WHAT DOES OAK BARREL AGEING DO TO MY WINE?

There are two main reactions that happen during oak ageing: the extraction of oak compounds and oxygen diffusion. During oak ageing, wine aroma complexity increases, color stability is enhanced, astringency is reduced, and overall structure becomes softer.

WHY THERE IS SO MUCH VARIATION IN OAK AROMAS?

There are many causes of variation and many of them interact to form a wide array of potential aroma profiles.

- Source of the oak: oak species, geographic origin, growing conditions and age can strongly affect wood structure and composition.
- Staves position on a trunk has been shown to influence its aroma composition.
- Staves seasoning and drying: Kiln drying or air drying, time, humidity...
- Cooperage processes add a considerable layer of variability.

WHAT IS THE EFFECT OF TOASTING?

Toasting oak during barrel processing modifies the structure and chemical properties of wood. Increasing temperature and length of toasting will:

- · Reduce oak lactone content that contributes to "fresh oak" and coconut aromas.
- Increase "vanilla", "caramel-like" and "roasted coffee" aromas associated with vanillin, furfural, 4-methylfurfural and maltol. At heavy toast levels these compounds decrease and are replaced by "spicy" (eugenol, isoeugenol, 4-methylguaiacol) and "smoky" characters (4-methylguaiacol, guaiacol, 2-methylphenol).

WHY USE BARREL ALTERNATIVES?

- Cost is the most common reason of using barrel alternatives. Using barrel alternatives reduces 'oak' investment (at least 10 times lower), cellar work, storage space and microbiological risks.
- Timing can be reduced. Contact time: 4 weeks for Enartis INCANTO Chips.
- Consistent and gualitative product for enological expectations and requirements.

HOW TO FIND THE RIGHT OAK ALTERNATIVE?

Define the targeted wine profile, the time available for ageing and the budget. Enartis offers trial kits containing small bags of oak chips to soak in wine for 3 weeks to run bench trials to help find the right product or blend for you.

WHAT ABOUT STORAGE AND REUSE OF OAK ALTERNATIVES?

Oak alternatives should be treated with care and stored in a clean, dry warehouse in its original packaging. Reuse is not recommended: the extraction and result will be different and risk microbial contamination.

Oak Chip Trials A WIDE RANGE OF OAK ALTERNATIVES

The extraction of oak compounds (oak aromas, polyphenols, polysaccharides,...) as well as the sensory impact on wine depends on many variables including the physiochemical characteristics of wine (pH, alcohol, titratable acidity, volatile acidity and SO₂), wine buffer capacity, storage temperature, contact time, etc.

When deciding which oak chips to use, we always recommend setting up trials. This way, winemakers can base their oak derivatives decision on accurate data and tasting.

Trial Set-Up:

- Use a 1.5 L wine bag or 750 ml bottle.
- Weigh the selected oak chips (dosages recommended for trials = 2-5 g/L).
- Add chips to bag or bottle.
- Write the date, wine lot, oak chips name and dosage on the label. Also prepare a control sample, without oak chips.
- We suggest an addition of 5 ppm SO, at filling to protect wine against oxidation.
- Taste after three weeks of soaking.

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Fill bag/bottle with wine. Be cautious of the oxygen input during filling and head space.