



# ESSENTIAL, Excellence in the Art of blending TANNINS

The **.essential** tannin range was elaborated by the R&D team of IOC, Institut Œnologique de Champagne, as the result of a broad program research. This range is based upon genuine blends of tannins extracted from cooperage-quality woods. It combines the selection of the best vegetal essences, from different botanical and geographical areas, to extraction techniques respectful of the raw materials.

Our range of tannins allows you to choose amongst our blends the one answering for the best your needs and winemaking process.



#### COMPOSITION

•**essential Oak Barrel** is a blend of ellagic tannins extracted from the heart of French oak trees [Quercus robur]



## **OENOLOGICAL APPLICATIONS**

When used during the pre-bottling stage, at least 48h before final microfiltration, **@SSENTIAL OAK BARREL** improves the sweetness and aromatic intensity of the wine. **@SSENTIAL OAK BARREL** improve fullness of wines.



## DOSAGE

• 1-10 g/hL (cf. attached template).

It is highly recommended to carry out laboratory tests so as to refine and adjust the dosage according to the style of your wine as well as to answer the final consumers' needs and requirements. When considering wines that are rich in polyphenols, structured and full-bodied, those tests must absolutely be undertaken to anticipate and forecast the technical and sensorial effects of **.essential oak Barrel** over the initial backbone of the wine.



## **IMPLEMENTATION INSTRUCTIONS**

Dissolve 1 volume of tannins into 10 volumes of hot water  $(35^{\circ}C)$  and add to the wine while pumping over (stirring), preferably with a Venturi Pipe system.

Add **.essential oak Barrel** to the wine at the fining stage or at the Pre-bottling stage, at least 48h before the final microfiltration. Lengthen this duration to 1 week in case of wines rich in polyphenols and full-bodied.



## **PACKAGING AND STORAGE CONDITIONS**

Bags of 500 g.

Before opening: Store the tannin bags in a cool, dry and well-ventilated area; odor-free at a temperature between 5°C and 25°C After opening: Seal the bag thoroughly after use and store it as indicated here-above. Once opened, the content must be used quickly. Once dissolved the preparation must be used within the day.







## **TECHNICAL NOTE**

The process of fining is one of the most important steps to achieving quality wines which meet the demands of the market. This is the time when the fermentation aromas blend with the varietal aromas to give the wine its final character. Young wines are often marked by green, astringent sensations in the mouth and a deep red colour - only during the fining stage do they evolve towards a fuller, rounder flavour, a more purplish-red colour and the expected varietal aromas.

Tannins are phenol compounds which play a vital role in the quality and stability of wines. Significant interest in adding tannins to wines has arisen thanks to their ability to react with numerous different compounds. Colour stabilization: the colour of a wine is stabilized through the formation of stable complexes between the coloured pigments (anthocyanins) in red wines and condensed tannins. Ellagic tannins perform an important anti-laccase action which allows them to prevent browning in white musts. All these interactions lead to a colour which remains more stable over time. Mouthfeel properties: the relationship between tannins and proteins is applied from the moment of tasting – for example, astringent tastes are linked to the reaction of the tannins in the wine with salivary proteins. Moderate, delicate astringency helps create a sense of structure, volume and persistence in the wine. Moreover, the formation of complexes between tannins and polysaccharides gives the tannins a fat, full-bodied feel. Antioxidant power: tannins are powerful antioxidants which can halt the chain oxidation reactions provoked by free radicals. Under this guise they act in synergy with SO2 and ascorbic acid to protect the wine. They allow the winemaker to gain greater control over the redox parameters right from the fining stage. Protein precipitation: proanthocyanidin tannins combine with proteins. This property is used in the clarification and stabilization of wines (together with bentonite) or to treat the effects of overfining. Effects on sulphur compounds: some organosulphur compounds (thiols) are responsible for the unpleasant aromas or the sense of flattening in wines. In red wines, tannins combine with thiols leading to the elimination of a part of the unwanted thiols and therefore reducing the negative impact they produce.

MUST		FINI	NG	PRE-BOTTLING					
W/R	R	W/R	R	W/R	R				
Average doses given in g-ml /hl									

Perform laboratory tests to determine the technical and sensory effects of the tannin and establish the optimum dose.

Privilège Bleu			1-5	5 - 20	1 - 5	3 - 20	Recommended for the pre-bottling stage
Privilège Noir			1-5	5 - 20	1 - 5	3 - 20	Recommended for the pre-bottling stage
Essential PEP	1 - 10	5 - 20	1-10	5 - 20	1-3	5-20	Stabilizes colour, improves structure, enhances varietal notes
Essential PEL	1 - 10	5 - 20	1 - 10	5 - 20	1-3	5 - 20	Improves structure, enhances varietal notes, antioxidant effect
Essential OAK Progress			1 - 5	10 - 20			Improves structure, stabilizes colour
Essential OAK Sweet			1 - 5	10 - 20	1-5	3 - 20	Recommended for the pre-bottling stage
Essential OAK Strong			1 - 5	5 - 20	1-5	3-20	Recommended for the pre-bottling stage
Essential OAK Barrel			1-5	5 - 20	1-5	3-20	Recommended for the pre-bottling stage
Essential Passion			1 - 5	10-20			Enhances fruity varietal notes, antioxidant effect
Essential Fresh					1 - 10	1-10	Refreshes white wines
Essential Free Off			0,5 - 2	5 - 20			Clarifies, eliminates sense of flattening
Essential Free Veg			5 - 10	10-20			Reduces grassy odours, enhances varietal notes
EssentialFine Barrel			1 - 5	5 - 20	1 - 5	3 - 20	Recommended for the pre-bottling stage
Essential Ready Hawa			10-30 m/hL	30-100 mL/hL	10-30 m/hL	10-100 mL/hL	Ready for use. Improves structure, antioxidant effect

For a direct and rapid assessment of the effects of IOC tannins on your wine, you can contact your local agent or the oenology team at the Perdomini-IOC group. We will be glad to perform tests either in your winery or our laboratories to identify the right tannin and the optimum dosage to arrive at your desired goal.