

# .eSSENTIAL PEP

## TANNINS

The **ESSENTIAL** range of tannins is the result of a broad programme involving the selection of the best woods and essences and the study of the effects of the different extraction techniques under different working conditions. **ESSENTIAL** tannins also undergo stringent tests in order to ensure constant quality in all the batches produced. Within the **ESSENTIAL** range you can find the right tannin for every winemaking need and for every technical requirement. Moreover, they come with advice on the right dosage for each different style of wine and for the various markets around the world. We always recommend performing a taste test before treatment. (For more information and recommendations please ask your local agent or the oenology team from the IOC group.)

### COMPOSITION

Tannins derived from grape seeds.

### TECHNICAL CHARACTERISTICS

ESSENTIAL PEP is a preparation made from condensed tannins extracted from grape seeds which provides notable antioxidant power. When used during alcoholic fermentation, it aids colour stabilization in red and rosé wines. When used during the fining and pre-bottling stages, it improves the body and the aromatic complexity of the wine. Its high reactivity makes ESSENTIAL PEP ideal for preventing various forms of oxidization, inhibiting oxydasic enzymes and directing redox reactions during fining. ESSENTIAL PEP is perfect for red wines where greater structure is needed. If used at the beginning of the fining process, it helps improve the qualitative characteristics of the wine. ESSENTIAL PEP can also be used before the final racking, at the end of the period of storage in wooden barrels, in order to protect the wine from any kind of oxidization.

### APPLICATIONS

In fermentation and racking of red and rosé musts to aid colour stability.  
During the fining and pre-bottling stages to improve aromatic complexity and structure.

### DOSAGE

Red and rosé musts: 1-20 g/hL  
White, red and rosé wines: 1-20 g/hL *(see the table on the back of this information sheet)*

At the pre-bottling stage, add ESSENTIAL PEP at least 48 hours before the final microfiltration. Perform laboratory tests to determine the technical and sensorial effects of ESSENTIAL PEP and to find the most suitable dosage for your wine.

### INSTRUCTIONS FOR USE

Dissolve 1 part product in 10 parts water, must or wine and add to the liquid during a pump-over, preferably using a Venturi tube.

### PACKAGE SIZES AND STORAGE ADVICE

0.5kg bag  
Before opening: store the product in a cool, dry and well-aired environment.  
After opening: carefully re-close the bag and store the product as indicated above.

Product for use in winemaking in compliance with the stipulations of EC Reg. no. 606/2009

## 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 SO<sub>2</sub> 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		FINING		PRE-BOTTLING	
W/R	R	W/R	R	W/R	R
<b>Average doses given in g/hL</b>					
Perform laboratory tests to determine the technical and sensory effects of the tannin and establish the optimum dose.					

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

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.