

# AlternativOAK

## Aromas released by wood

### Lactons (Whisky Lacton)

The most important in wood are Cis and Trans of  $\beta$ -Methyl- $\gamma$ -Octalacton, also known with the name of whisky lacton, with the characteristic smell of coconut. This compound, if present in small quantities, smells like fresh wood. The Cis combines the sensation of coconut with a light but persistent and sweet herbaceous aroma, the Trans adds a sensation of spiced, but 4 times less intense.

The ageing of the oak influences the relationship between Cis and Trans Octalacton: a more aged wood will have a Cis content higher than fresh wood; heavy toasting decreases the Lacton quantity. The American wood normally presents higher quantities of Lactons with regard to French wood.

### Vanillin

It is the aromatic compound of wood for excellence and is present in high quantities in oak wood. From the aromatic point of view, the perception of vanillin is lower than the other chips compounds and toasting plays a fundamental role on this compound, as it increases its release up to middle-high levels, but if toasting is too heavy, it is considerably reduced.

### Gaiacol

This odor compound affects the 4-methyl-gaiacol, odors giving origin of carbon and smoke, and may be in some cases also associated to spices. It derives from the degradation of wood lignin during toasting.

### Eugenol

Associated to the aroma of cloves, it is one of the main odorous compounds of wood, it increases during ageing and with toasting.

### Furfural - 5 methyl-furfural - hydroxi-methyl-furfural

They are originated from a degradation by thermal induction of sugar and carbohydrates, their main descriptors are peanut butter, sweet and caramel. In order to be perceived, they have to be released at high doses, as they are not easily identifiable. They derive from the heating (toasting) of carbohydrates present in wood; the concentration of such aromas decreases if temperature is too high, as the strong energy released by high temperatures starts the Maillard reaction, which makes carbohydrates and sugars react with nitrogenous compounds, facilitating the formation of maltol, thus changing the characteristic aromatic descriptors into the smell of toasted bread.



**AEB USA**  
111 N Cluff Avenue 25134  
Lodi, CA 95240 (USA)  
Tel: +1 2096258139  
Fax: +1 2092248953  
info@aebusa.com  
www.aeb-group.com

Reference: AlternativOAK\_DEP\_EN\_0110517\_USA



# AlternativOAK

THE BEST AMERICAN WOOD FOR THE REFINEMENT OF WINES



# AlternativOAK

## The usage of wood in the wine



The usage of wood in wine has a long tradition: from the simple function of a container, it has become a real tool to refine and characterize wines.

The study of the action mechanisms between wood and oxygen and their interaction towards polyphenolic substances has clarified how important are factors such as the different origin areas of the oak, the age of the tree and the kind of seasoning. These characteristics markedly influence the wine taste, thanks to the odorous and gustative compounds that are released during the refining stage.

AEB has begun a great experience in the use of wooden chips: the process, starting in 2009, has allowed us to develop a brand new range, considering the interaction with the variety of grapes/wines that characterize the European context.

## Origin of the oak

The American wood gives wine an "international" taste, sweet, easy to be perceived, and is generally suggested for wines where the polyphenolic structure should not be affected too much.

The more marked flavor sensations are: vanilla, coconut, sweet cream and fresh wood. It can be said that aromas deriving from American chips have a more marked impact.

## Oak manufacturing process

Once dehydrated, natural oak is toasted and cutted.

The different toasting level and the final size of shavings allow to obtain various aromatic effects and transfer speed of wood molecules.

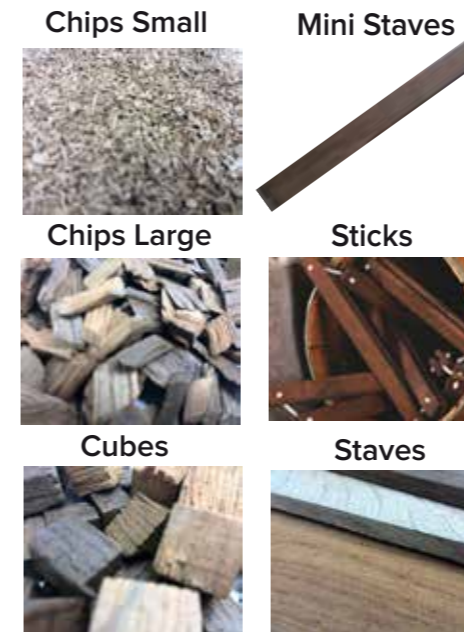
Indeed the release depends on the relative contact surface between wine and wood.



## One range for any need

AlternativOAK is a product line born from the collaboration with an American supplier with which oak aging and toasting processes have been perfected. The process, called "slow roasting", has been improved over time and ensures an uniform toasting level, coherent in color.

Thanks to the presence of high quality durmast, line AlternativOAK is able to satisfy any need. The choice include Chips, Cubes, Staves as well as Mini Staves and Sticks, more suitable to be inserted in barriques.



	Toasting degrees	Seasoning (months)	Packaging
Chips Small	L M M+ S	24	22,7 kg net weight
Chips Large	L M M+ S	16-18	22,7 kg net weight
Cubes	L M M+ S	18-24	10 kg net weight
Sticks	L M M+	24-36	32 pieces
Staves	L M M+ S	36	30 pieces
Mini Staves	L M M+ S	36	100 pieces

## Oak toasting

The toasting level gives the intensity of the chip characterization.

