

Application leaflet



natural  *specialities*
by Ajinomoto OmniChem

OAKTAN

Oak tannins for wine making.

1. INTRODUCTION

The use of Oak for making barrels is a practice that dates back to the antique Celtic world. Oak was chosen because of its tight-grained wood allowing the production of leak-proof barrels. Indeed in ancient times barrels were multiple-purpose storage containers both used for solid and liquid cargo.



It was only much later that it occurred to people that the (prolonged) storage of wine in such Oak vessels contributed highly to the taste profile of the final wine.

Polyphenolic components present in Oak wood are primarily responsible for these taste modifications.

Since OmniChem started its extraction business shortly after World War 2 our company became the world leader in hydrolysable tannins and is among the top tannin suppliers to the wine industry.

In order to further consolidate our leading position we have now completed our product portfolio with the introduction of the Oak derived Oaktan line of products.

2. RAW MATERIALS

In order to mimic the traditional Oak lagging process as closely as technically achievable we carefully select our raw materials. Only French (Quercus Robur) and American Oak (Quercus Alba) are suitable for the production of the Oaktan products.

The wood used for the production of Oaktan is selected from the same forests as the Oak used for making wine barrels. Similar to barrel makers we only use mature heartwood for the production of our Oaktan.

This is contrary to some competing Oak Extracts that use waste streams from the furniture or floor covering industry or even sapwood as raw material.



Oak Chips

3. EXTRACTION METHOD

High quality barrels are produced using naturally dried and seasoned Oak staves. During this time consuming process the wood is left outside open to the elements and gradually shifts colour to a silvery grey due to exposure and enzymatic attack by yeasts, moulds and fungi generally available in the surrounding environment. This natural ageing process

induces dramatic modification to the polyphenol composition of the wood.



By using a unique extraction process we are now able to simulate this ageing process and catch some of the subtle notes associated with high quality Oak barrels in our Oaktan tannins.

4. GRADES

To further mimic the barrel making process the Oaktan grades can be delivered in both a toasted and a non-toasted variety:

American Oak:

Oaktan AU non-toasted
Oaktan AT toasted

French Oak:

Oaktan FU non-toasted
Oaktan FT toasted

5. APPLICATION

Tannins have many uses in the manufacturing of wine. They are powerful anti oxidants and as such are used to protect wine against oxidative degradation and the influence of light, the so-called sun struck effect.

They are also used to adjust taste of wines lacking tannins and provide more structure and body.

Besides the introduction of typical tannin-notes our Oaktan products also provide additional taste components

associated with the lagering of wine in Oak barrels such as vanilla notes. They will also impart a woody character and Oaktan products can advantageously substitute the use of barrels or oak chips, resulting in lower costs and help reduce the handling of the wine.

Our unique extraction process allows for the production of full-bodied products, with a lower bitterness and astringency compared to competitors.

Tannins are also extensively used for colour stabilization.



PREPARING TANNIN SOLUTIONS

Oaktan should be dissolved in water (room temperature, maximum concentration 10 %) before adding it to the wine. Alternatively it can also be dispersed in wine and added proportionally.

USAGE

Oaktan products can be applied at any stage of the vinification process, from fermentation up to just before bottling. The exact addition stage of

the tannins will depend on the desired effect.

Due to the easy handling properties of our Oaktan products they are the perfect tools to correct tannin levels during maturation (stainless steel tank or oak barrel) or even before bottling.

By using Oaktan the elaborate and time consuming lagering process in Oak barrels can be eliminated or simplified. By replacing a highly variable raw material such as Oak chips or barrels by a standardized product such as Oaktan the wine making process can also be better standardized allowing for a more constant high quality over the years.

DOSAGE:

Typically, dosage levels are 2-5 g Oaktan/hl wine for colour stabilisation during fermentation, and 5-15 g Oaktan/hl wine in the maturation process.

The choice of American or French oak will depend on personal preferences, but, due to the nature of the extracts, American oak will have less influence on colour.

For this reason we also advice to use these extracts in white wines.

OTHER APPLICATIONS:

Oaktan can also be used to give a woody character to:

- alcoholic beverages
- vinegar
- table sauces
- etc...

6. PACKAGING

The different Oaktan grades are available as spray-dried powders in 25 kg fibre drums lined with an inner polyethylene bag or in 10 kg cardboard boxes also lined with an inner polyethylene bag.

7. FURTHER INFORMATION

Safety information is provided in our **Material Safety Data Sheet**.

Upon request a controlled copy of our **Specifications** can be provided by our QC-department.

Every delivery is accompanied with a Certificate of Analysis.



Information provided in this paper is based on the present state of our knowledge. Some of the applications mentioned in this document can be protected by international patent law. Ajinomoto OmniChem cannot be held responsible for patent law infringements and the customer should contact the patent holder if so required.

Due to the many different parameters involved we are not able to submit a general recommendation. It only shows without liability on our part the uses to which our products can be put. Therefore initial trials are absolutely necessary. Ajinomoto OmniChem cannot be held responsible for the consequences of the application of the above mentioned products.