

# ENARTIS PRODUCTS MATURATION PHASE

- 6 TANNINS
- 10 POLYSACCHARIDES
- 12 OAK ALTERNATIVES
- 16 FINING AGENTS
- **20** SULPHITING AGENTS
- **22 STABILISING AGENTS**

### enartis



ENARTIS HAS DEVELOPED IMPORTANT SYNERGIES OVER THE YEARS WITH WINE GROWERS AND PRODUCERS IN COUNTRIES WITH STRONG WINEMAKING TRADITIONS.



### **200+ EMPLOYEES**

IN THE WORLD TO MEET THE NEEDS OF WINERIES OF ALL SIZES.



### 10 000 PRODUCERS

ENARTIS PROVIDES MORE THAN 10 000 PRODUCERS WITH INNOVATIVE SOLUTIONS AND SAFE PRODUCTS.



### **50 COUNTRIES**

ENARTIS PRESENCE AROUND THE WORLD.



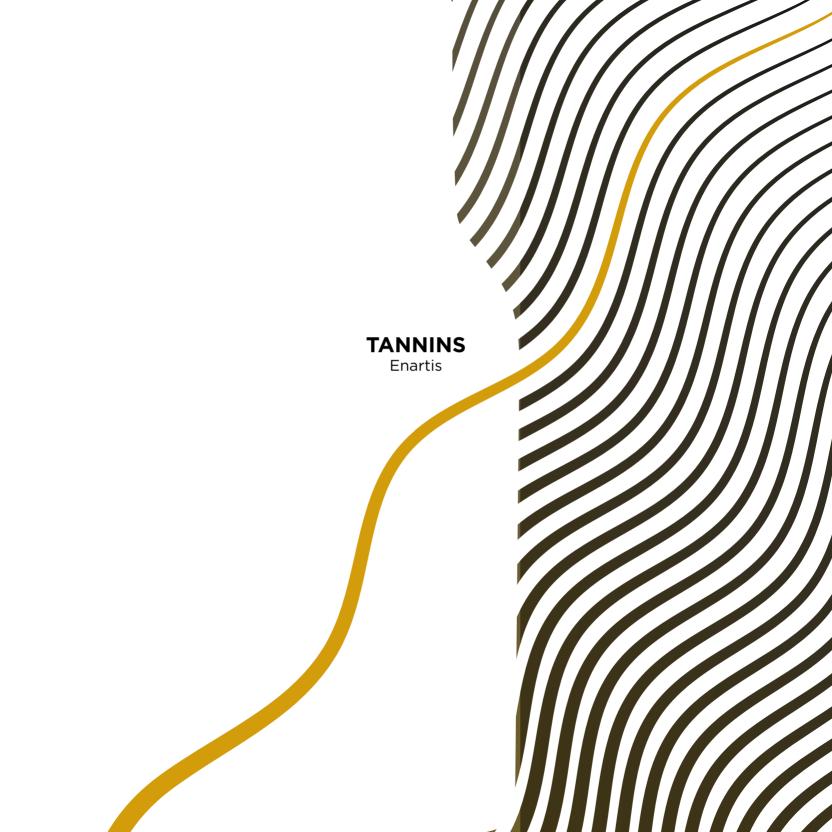
# 300 SPECIALISED PRODUCTS

THAT FULLY EXPRESS AND EXALT THE CHARACTER OF WINES.



### **FSSC 22000**

ENARTIS HAS RECEIVED THE
INTERNATIONAL FOOD SAFETY
CERTIFICATION AND WORKS IN
COMPLIANCE WITH THE MOST
STRINGENT OENOLOGICAL
AND FOOD QUALITY REGULATIONS.



### **TECHNICAL TANNINS**

#### TAN BLANC

Gallic tannin with a high antioxidant effect, strengthens the protective action of  $SO_2$  and produces wines that are less sensitive to browning and loss of aromatics.

#### TAN F

Grape seed tannin enriched with monocatechins. It is especially reactive in combining free anthocyanins in long-term stable pigments. Particularly recommended during microoxygenation.

#### TAN MICROFRUIT

Formulation of condensed and hydrolysable tannins to be used in conjunction with micro-oxygenation. It contributes to colour stabilisation, enhances fruit aromas and reduces vegetal notes.

### **TAN SLI**

Tannin produced from untoasted American oak with a unique process that makes it extremely effective in blocking oxidation and prolonging wine shelf life. It can be used as an alternative to SO<sub>2</sub>.

### **OAK TANNINS**

### TAN CŒUR DE CHÊNE

Extracted from toasted French oak, this tannin can be used to prolong the lifespan of barrels and increase wine aroma complexity with notes of vanilla and spice.

### TAN DARK CHOCOLATE

Tannin obtained from medium-heavy toasted French oak. It enhances sensory characteristics such as chocolate and spice aromas, structure and softness found in barrel-aged wines.

### TAN ELEVAGE

Tannin extracted from seasoned French oak. It prevents and treats the formation of reduced aromas and increases wine structure.

### TAN NAPA

Tannin extracted from toasted American oak for finishing wines that may benefit from an increase of structure, sweetness and oaky aroma.

### TAN RICH

Formulation of oak and condensed tannins that contributes to wine structure and balance.

**TANNINS**Enartis

### **GRAPE TANNINS**

#### TAN FRESH FRUIT

Blend of tannins extracted from the wood of white fruit trees. It improves wine resistance to oxidation and ageing, refreshes aroma and imparts softness.

### **TAN FRUITAN**

Blend of condensed tannins, mainly extracted from white grape seed that helps colour stability, antioxidant protection and the mitigation of herbaceous aroma.

#### **TAN SKIN**

This pure white grape skin tannin improves protein and colour stability and enhances wine structure, softness and fruity aroma.

### TAN TOTAL FRUITY

Blend of tannins extracted from wood of red fruit trees and white grape skins. It was designed for enhancing wine fruit aroma and adds antioxidant protection just before bottling.

#### TAN UVA

Pure grape seed tannin for improving colour and protein stability, structure and fruit aroma.

### **UNICO RANGE**

Unico is a line of tannins that were developed solely by Enartis and are completely unique in the market. The innovative production process, proprietary to Enartis, makes it possible to obtain tannins with enhanced characteristics beyond those of typical oenological tannins: intense and distinct aromas, high content of tannin and high content of polysaccharides, making them soft and sweet on the palate.

### UNICO #2

Condensed tannin extracted from the wood of red fruit trees, Unico #2 will significantly enhance red fruit aromas, wine softness and sweet sensation.

#### UNICO #3

A blend of condensed and hydrolysable tannins that are able to freshen wine aroma by enhancing citrus and floral notes. Particularly suitable for treating wines with slightly oxidised and over-ripe aromas.





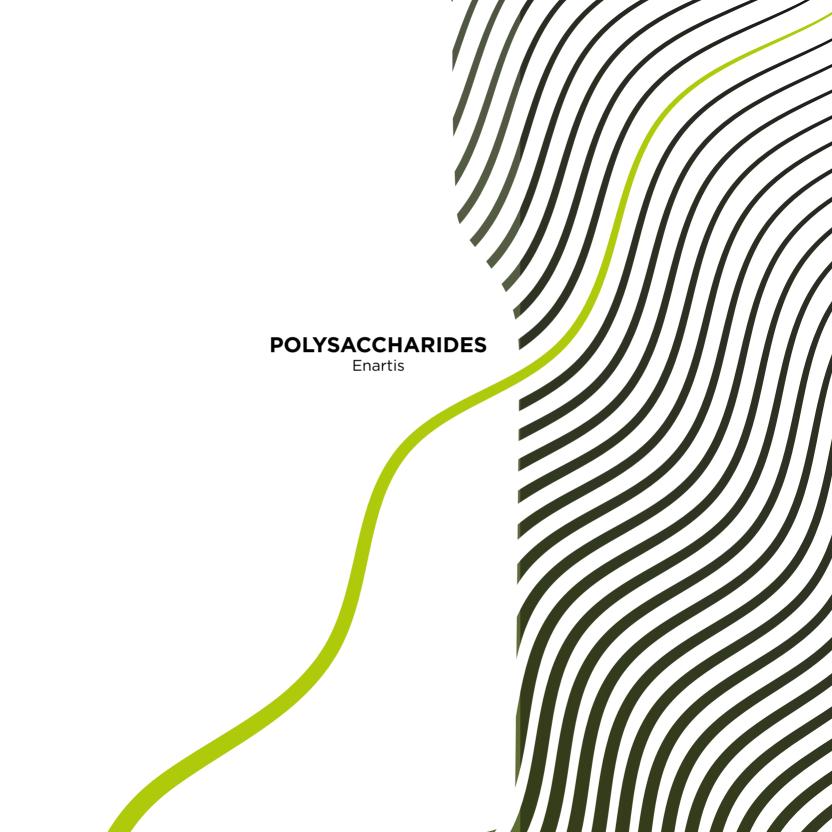
### WHY USE TANNINS?

Tannins can act as antioxidant and/or antioxidasic agent, improve colour and protein stability, contribute to wine flavour, structure and body and prevent pinking and the "light-struck" defect. The different origins and properties of oenological tannins can produce substantially different results. Enartis has studied exogenous tannins and their effects for many years to select and produce an extensive range of the highest quality tannins for winemaking.

### **CHOOSING THE RIGHT TANNIN**

	COLOUR	ANTONOANT EFFECT	MCREASE OF ARONATIC CLEMINICATIO	PROTEIN REMOVAL	SMUCIUME	ASTRINGENCY	SOTTIVESS	AROMA WTENSITY	Process
BLANC		****			66	66			ELDERFLOWER
CŒUR DE CHENE								***	VANILLA, CARAMEL, SPICES
DARK CHOCOLATE		***	• •		***		***	****	COCOA, TOASTED HAZELNUT, VANILLA
Е			66	***	****		66	444	GRAPE, FRESH FRUIT
ELEVAGE	66	***	***	***	***	***	66	***	CARAMEL, LICORICE, VANILLA
FRESH FRUIT					••		***	***	LEMON, CITRUS, MINT, FRESH FRUIT
FRUITAN	***								RED FRUIT, SPICES
MICROFRUIT	****	***	666	***	***	66	***	***	RED FRUIT, GRAPE, WOOD
NAPA	66	***			***		****	****	COCONUT, CARAMEL, COFFEE, COCOA
RICH									TOSTED OAK, COFFEE, SPICES
SKIN	***	866	66	***		66	66	***	GRAPE, TEA, WHITE FRUIT
SLI	۵۵	****	***	***	66		***	***	OAK, COCONUT, VANILLA
TOTAL FRUITY									STRAWBERRY, PLUM, CHERRY, BERRIES
UVA	***	***	66	***	***	***	66	****	WHITE FRUIT
UNICO #2	***	***	**	66	***		***	****	RED FRUIT, WILD BERRIES, CHERRY
UNICO #3								***	FLORAL, LEMON, MINT, HERBAL

**TANNINS**Enartis



### **POLYSACCHARIDES**

### SURLÌ NATURAL

Inactivated yeast selected for replacing natural lees and simulates the effect of *sur lie* ageing.

### **POLYSACCHARIDES**

Enartis

### WHY USE POLYSACCHARIDES?

Every day, more is known about the contribution made by polysaccharides to the stability and quality of wine. A timely addition during maturation results in wines with a longer shelf life, greater stability, and with enhanced aromatic freshness and mouthfeel.



### **OAK ALTERNATIVES**

### **INCANTO CREAM**

Chips from medium toasted French oak. It gives a pleasant and complex sweet aroma and taste.

### **INCANTO VANILLA**

Medium toasted American oak chips, for an intense vanilla, coconut and bourbon profile.

### INCANTO CARAMEL

Chips produced from medium toasted French oak. It gives a caramel, cappuccino aroma while increasing sweetness on the palate.

### **INCANTO SPICE**

Blend of French and American oak treated with a different toasting process. It gives a very complex and intense spice aroma. Best results with Pinot Noir, Shiraz and Cabernet Sauvignon.

### **INCANTO TOFFEE**

Heavy toasted French oak chips. It gives a very complex aroma of cafè macchiato, toasted almond and vanilla.

### INCANTO DARK CHOCOLATE

Chips and mini-staves produced from heavy toasted French oak. It impacts wine aroma by bringing intense notes of chocolate, cocoa and black coffee.

### **OAK ALTERNATIVES**

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### WHY USE OAK ALTERNATIVES?

Enartis offers a diverse portfolio of oak chips and mini-staves 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. When released into wine, wood compounds enhance structure and the perceived sweetness of wine, impacts the aromatic profile and can help colour stabilisation.

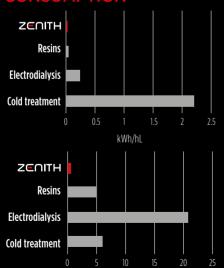


# ZENITH®, THE REVOLUTION IN COLLOID STABILISATION

### WHAT IS ZENITH®?

It is a cutting-edge, cost-effective and eco-friendly potassium polyaspartate-based product range allowing you to switch off your cooling system, dramatically reducing production costs and gas emissions, while maintaining the organoleptic aspects of your wine and ensuring the best colour and tartaric stabilisation over time and under temperature stress.

## UP TO 80% SAVINGS IN ENERGY AND WATER CONSUMPTION



Litres of water/hL of wine

Data Stabiwine



### #innovation

An ambitious challenge and 6 years of passionate research in collaboration with public and private European institutions, universities and major players in the winemaking industry to develop a cutting-edge product.



### #performance

The most effective tartaric (up to 300  $\Delta\mu S$ ) and colour stabiliser over time, under all conditions and temperature stress. Maximum filterability up to 0.45  $\mu m$ .



### #quality

Respects organoleptic aspects of wine.



### #cost-effectiveness

Easy-to-use, eliminates wine loss during stabilisation and dramatically cuts energy and water consumption while reducing labour and ancillary costs. Up to 80% saving in energy and water consumption.



### #sustainability

An eco-friendly product that guarantees 90% reduction of CO<sub>2</sub> emissions for greater environmental sustainability.
Zenith loves the planet!

### **ENARTIS PRODUCT OFFER**

ZENITH UNO ZENITH COLOR

# SHELF LIFE IMPROVEMENT PROGRAM

### LOSS OF AROMAS AND FRESHNESS IN YOUR WINE?

Premature or not, ageing is caused by oxidation. It is through a redox reaction catalysed by transition metals ( $Cu^+$  and  $Fe^{2+}$ ) that oxygen is converted into highly reactive radicals, capable of oxidizing a number of organic compounds.

In white wines, oxidation causes browning, pinking, development of bitterness, loss of varietal and fresh aroma and appearance of heavy notes of honey and beeswax.

In red wines, premature ageing is characterised by development of prune and stewed fruit flavours, together with a flattened palate and an increase of brown/orange hues. In short, premature ageing makes all wines similar, with loss of varietal identity and terroir.

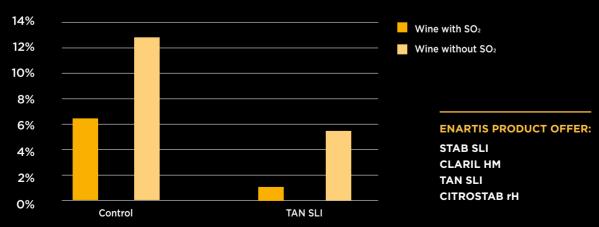
### HOW TO EXTEND WINE FRESHNESS AND SHELF LIFE

Enartis has developed a program dedicated to the extension of a wine's shelf life

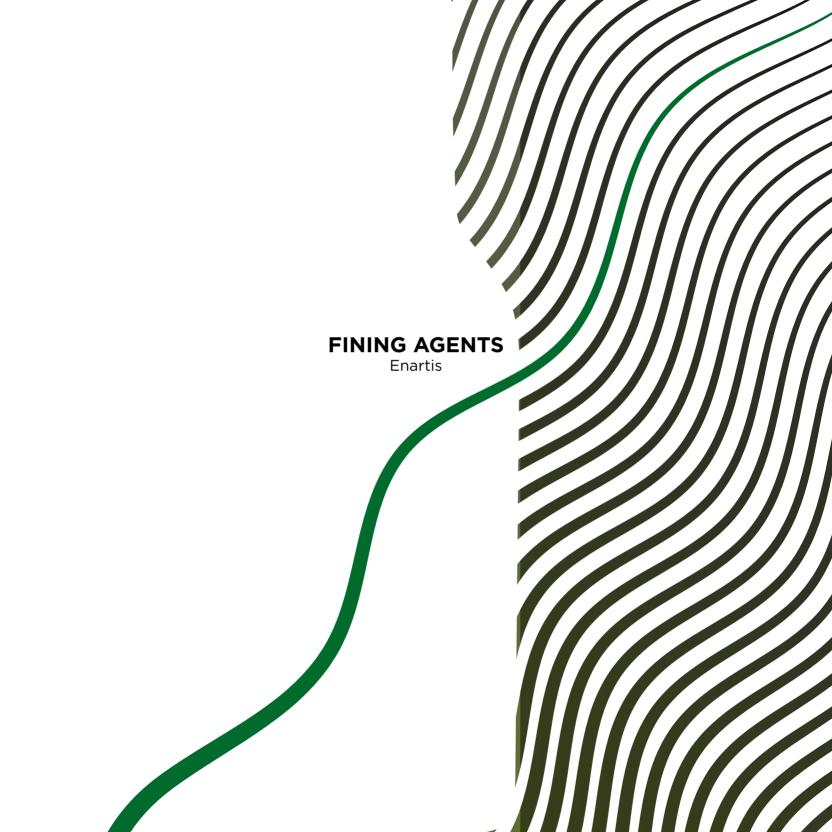
This program helps winemakers preserve freshness when wines are stored for a prolonged period of time. The Enartis SLI strategy includes several products that can be used throughout the winemaking process and during storage that have a series of capabilities to:

- Reduce the content of catechins (precursors to oxidation)
- Remove metals (catalysts of oxidation)
- Control redox potential (decreasing the risk of oxidation)
- Control oxidation

### **ENARTIS TAN SLI LIMITS WINE OXIDATION\***



\*increase of the yellow hint (Abs 420 nm) measured six days after two racks off





### FINING AGENTS FREE FROM ANIMAL PROTEINS

#### **COMBISTAB AF**

Complex containing PVPP, plant protein and silica. Highly effective in the prevention and treatment of oxidation, pinking and the reduction of bitterness.

### **PLANTIS AF**

This pure pea protein allows juice and wine clarification while producing a small volume of lees. It removes polyphenols responsible for wine oxidation and bitterness.

### PROTEIN-BASED FINING AGENTS

### **BLANCOLL**

Pure egg albumin in powder form.

### **FINECOLL**

Granular isinglass soluble in cold water for a deep but gentle clarification.

### **GREEN GELATINA**



Pure hot soluble gelatine, organic certified in accordance with European legislation.

### **HYDROCLAR 30**

30% Liquid solution of medium hydrolysed food grade gelatine.

### **HYDROCLAR 45**

45% Liquid solution of low molecular weight food-grade gelatine.

### **PROTOCLAR**

Pure potassium caseinate in granulated form.

### **FINING AGENTS**

Enartis

### WHY USE FINING AGENTS?

Fining agents can be used for many purposes in winemaking including clarification, filterability improvement, prevention of haze and sediment formation, organoleptic profile and wine colour improvement, and removal of undesirable elements from wine. Enartis has also developed a line of fining agents free from allergen and animal proteins, suitable for vegetarian and vegan wines, as alternatives to egg albumin, casein, potassium caseinate, isinglass and fish gelatine.

### INORGANIC FINING AGENTS

### **PLUXCOMPACT**

Bentonite that is very effective in removing proteins with a small amount of lees.

Recommended for eliminating unstable colour compounds.

### SIL FLOC

Pure silicon dioxide in aqueous solution.

### CORRECTIVE FINING AGENTS

### **CLARIL HM**

This fining agent benefits from the synergistic actions of chitosan and PVI/PVP to reduce the concentration of iron, copper, hydroxycinnamic acids and catechins, which are key players in the process of oxidation.

#### **FENOL FREE**

Activated carbon extremely effective in removing volatile phenols produced by *Brettanomyces* or responsible for smoke taint. It improves wine aroma without affecting colour and structure.

### STABYL MET

Copolymer of PVI/PVP and silica. It prevents oxidation, browning, pinking and formation of haze by removing the main catalysts of oxidation, iron and copper.

### FINING AGENTS Enartis

### **BLENDS**

### **CLARIL SP**

Complex clarifying agent consisting of bentonite, PVPP, potassium caseinate and silica. It is recommended for the prevention and correction of wine oxidation.

### **NEOCLAR AF**

Blend of bentonite, gelatine and activated carbon. It ensures fast clarification with a minimal amount of lees even in difficult situations. Particularly effective in reducing off-flavours and herbaceous characters.



Enartis



### **SULPHITING AGENTS**

### **EFFERGRAN**

Effervescent, granulated potassium metabisulphite. When added to wine, it rapidly dissolves and ensures a homogenous distribution of the released SO<sub>2</sub> without requiring pump-overs in tank volumes of up to 50 000 litres.

### **EFFERGRAN DOSE 5/EFFERBARRIQUE**

Effervescent, granulated potassium metabisulphite in pre-dosed packaging for an easy  $SO_2$  addition in barrels and small containers.

#### WINY

The highest quality potassium metabisulphite in the market. Thanks to Enartis' production expertise, WINY is virtually odourless, does not form rocks and has a concentration of metabisulphite superior to 99%.

### **SOLFOSOL M** (15% solution)

Aqueous solution of potassium bisulphite. Enables sulphur dioxide to be easily and safely added from harvest to bottling.  $SO_2$  concentration: 150 g/L.

### **SULPHUR STRIPS**

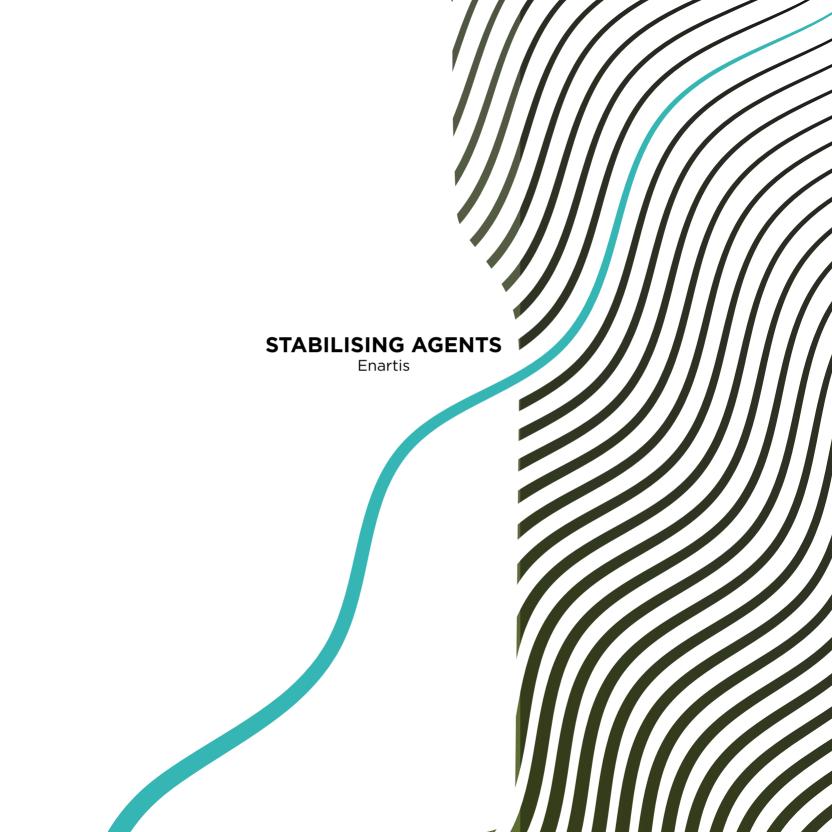
Sulphur strips for the sanitisation of barrels and wooden casks.

### **SULPHITING AGENTS**

Enartis

### WHY USE SULPHITING AGENTS?

For its antioxidant, antioxidasic and antiseptic effects, sulphur dioxide is considered the wine preservative *par excellence*. Application of  $SO_2$  is one of the most common practices in winemaking. An important aspect of this treatment is the time it takes to prepare and apply the product.  $SO_2$  comes in various forms: gas, solution, powder, effervescent granules, and depending on the application, one form might be preferred over another.





The most filterable Gum Arabic in liquid solution in the market. Improves wine softness.

### **MAXIGUM**

**CITROGUM®** 

Solution of Gum Arabic Verek for colour stabilisation of red wines.

### TARTRATE STABILISING AGENTS

### **AMT PLUS QUALITY**

Pure metatartaric acid with high esterification rate.

### **CELLOGUM LV20**

Liquid preparation containing 20% CMC. The most filterable and easiest to use on the market.

#### **ENARTIS STAB MEGA**

Liquid solution containing CMC, mannoproteins and Gum Arabic Verek for tartrate and colour stabilisation of red wines.



Solution of potassium polyaspartate A-5D K/SD for full tartaric stabilisation of white, rosé and colour stable red wines.



Solution of potassium polyaspartate A-5D K/SD and Gum Arabic Verek for full colour and tartaric stabilisation.

### STABILISING AGENTS Enartis

### WHY USE STABILISING AGENTS?

In today's wine market, it is crucial for wines to be visually appealing to consumers: any haze or precipitate is unacceptable and can damage brand reputation. This section will cover the main instabilities that we encounter in wine and the Enartis approach for successfully managing them. Because of their purity and microbial stability, all of our stabilisers can be added with confidence at any stage during preparation for bottling.

### MICROBIAL STABILISATION

### **STAB MICRO**

Pure activated chitosan. It controls the growth of unwanted contaminants that can spoil wine during ageing. Particularly recommended for removing *Brett* and the off-flavours produced by this microorganism.

### STAB MICRO M

Preparation based on activated chitosan designed for the treatment of musts and cloudy wines. It can be used for reducing spoilage yeast and bacteria that are responsible for the production of acetic acid, off-flavours or the onset of unwanted malolactic fermentation.

### MULTI-PURPOSE STABILISING AGENTS

### STAB SLI

These selected "active lees" balance wine redox potential, scavenge oxygen and prevent the oxidation of wine colour and aromas during storage in bulk.

### CITROSTAB rH

Pre-bottling coadjunct based on powerful antioxidant compounds that protects wine from undergoing alteration such as pinking, white haze and atypical ageing.

### SORBOSOL K

Pre-bottling stabiliser containing potassium sorbate, potassium metabisulphite and L-ascorbic acid for wine antioxidant and antimicrobial protection.

### **REFRIGERATION AGENTS**

#### **ENOCRISTAL SUPERATTIVO**

Rapid crystalliser for cold stabilisation of tartrates. It accelerates precipitation of potassium bitartrate during cold treatment without affecting wine acidity.







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