MATURATION HANDBOOK

enartis

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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.

MALOLACTIC FERMENTATION

Enartis

MALOLACTIC FERMENTATION

ML UNO NEW

Selected strain of *Oenococcus* for the production of wines with clean and fruity aroma and negligible content of biogenic amines.
Packaging: designed for 25 hL, 250 hL, 1000 hL

ML SILVER

Strain for malolactic fermentation in wine with high alcohol and polyphenols content. It helps to increase the fruity characteristics of the wine. Can be used for both sequential and co-inoculation.
Packaging: designed for 25 hL, 250 hL, 1000 hL

NUTRIFERM ML

Nutrient specific for malolactic bacteria. It stimulates the growth of bacteria and dramatically reduces the length of malolactic fermentation even in difficult wines.
Dosage: 20-30 g/hL - **Packaging:** 1 kg

NUTRIFERM OSMOBACTI

When used at the end of the rehydration phase and prior to inoculation, it increases the rate of surviving cells thus allowing a more rapid start and faster conclusion of malolactic fermentation.
Dosage: 50 g for each 25 hL dose of bacteria
Packaging: 100 g

WHY USE MALOLACTIC BACTERIA?
Malolactic fermentation (MLF) is the conversion of malic acid into lactic acid by *Oenococcus oeni* which impacts wine quality and stability. The success of MLF depends on wine conditions, choice of ML strain and preparation of the inoculum. Enartis is proud to offer a complete portfolio of malolactic bacteria, activators and nutrients for an easy, clean and successful MLF.

ENZYMES

Enartis

ENZYMES

ZYM ELEVAGE

Micro-granulated preparation with pectolitic and glucanase activity. It accelerates mannoproteins extraction during ageing on fine lees and improves filterability of wines obtained from mouldy grapes.
Dosage: 2-5 g/hL - **Packaging:** 250 g

ZYM LYSO

Lysozyme in micro-granulated form.
Dosage: 10-50 g/hL - **Packaging:** 1 kg

ZYM RIVELA

Micro-granulated enzyme with pectolitic and ß-glycosidase activities. It can be used in wine to increase the expression of primary aromas.
Dosage: 2-4 g/hL - **Packaging:** 100 g - 250 g

ZYM RS

Pectolitic enzyme in liquid form. It can be used to improve wine clarification and filterability.
Dosage: 2-5 mL/hL - **Packaging:** 1 kg

WHY USE ENZYMES?
Enzymes are biological catalysts of reactions and naturally present in all living systems. Enzymes are essential for improving press yield, clarification, flotation, wine filterability, aroma and polyphenol extraction, as well as enhancing aromatic expression, improving mouthfeel, contributing to protein stability and helping to stabilise colour.

TANNINS

Enartis

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.
Dosage: 4-8 g/hL - **Packaging:** 1 kg - 12.5 kg

TAN CLAR

Extracted from chestnut wood, Tan Clar is the tannin for fining par excellence.
Dosage: 4-10 g/hL - **Packaging:** 1 kg - 12.5 kg

TAN E

Grape seed tannin enriched with monocatechins. It is especially reactive in combining free anthocyanins in long-term stable pigments. Particularly recommended during micro-oxygenation.
Dosage: 5-20 g/hL - **Packaging:** 1 kg

TAN MAX NATURE

Blend of condensed and ellagic tannins recommended for treating reduction and off-flavours without changing wine structure.
Dosage: 3-15 g/hL - **Packaging:** 1 kg - 10 kg

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.
Dosage: 5-20 g/hL - **Packaging:** 1 kg

TAN MICROX

Blend of grape seed and oak tannin designed to be used during micro-oxygenation to help colour stability and the build-up of a soft structure.
Dosage: 5-30 g/hL - **Packaging:** 1 kg

TAN SLI

Tannin produced from untoasted 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_2.
Dosage: 0,5-2 g/hL - **Packaging:** 250 g

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.

OAK TANNINS

TAN CŒUR DE CHENE

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.
Dosage: 3-10 g/hL - **Packaging:** 0.5 kg - 1 kg

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.
Dosage: 0.5-15 g/hL - **Packaging**: 0.5 kg

TAN ELEVAGE

Tannin extracted from seasoned French oak. It prevents and treats the formation of reduced aromas and increases wine structure.
Dosage: 2-15 g/hL - **Packaging:** 1 kg

TAN EXTRA

Pure oak tannin characterised by intense aromatic notes of vanilla, caramel, cocoa and toasted oak. It contributes softness and sweetness to mouthfeel.
Dosage: 3-15 g/hL - **Packaging:** 0.5 kg - 1 kg

TAN NAPA

Tannin extracted from toasted American oak for finishing wines that may benefit from an increase of structure, sweetness and oaky aroma.
Dosage: 3-15 g/hL - **Packaging**: 0.5 kg - 1 kg

TAN RICH

Formulation of oak and condensed tannins that contributes to wine structure and balance.
Dosage: 5-20 g/hL - **Packaging:** 1 kg

TAN SUPEROAK

Blend of oak and condensed tannin. It helps to open the aroma and to increase the softness of wines ready for bottling.
Dosage: 5-20 g/hL - **Packaging:** 1 kg

TAN TOFFEE

Ellagic tannins extracted from medium/heavy-toasted French oak. Enhances butterscotch and toffee aromas, improves structure and length.
Dosage: 1-15 g/hL - **Packaging:** 0.5 kg

TAN VANILLA

Extracted from medium-toasted French oak, Tan Vanilla increases vanilla, custard and coconut aromas and improves wine structure and sweetness.
Dosage: 1-15 g/hL - **Packaging:** 0.5 kg

GRAPE TANNINS

TAN ELEGANCE

Blend of condensed tannins, mainly extracted from white grape skin. It contributes to wine colour and aroma, freshness and a soft palate.
Dosage: 3-10 g/hL - **Packaging:** 1 kg

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.
Dosage: 0.5-10 g/hL - **Packaging:** 1 kg

TAN FRUITAN

Blend of condensed tannins, mainly extracted from white grape seed that helps colour stability, antioxidant protection and the mitigation of herbaceous aroma.
Dosage: 3 -20 g/hL - **Packaging:** 1 kg

TAN SKIN

This pure white grape skin tannin improves protein and colour stability and enhances wine structure, softness and fruity aroma.
Dosage: 3-20 g/hL - **Packaging:** 0.5 kg - 1 kg

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.
Dosage: 0.5-20 g/hL - **Packaging:** 1 kg

TAN UVA

Pure grape seed tannin for improving colour and protein stability, structure and fruit aroma.
Dosage: 3-10 g/hL - **Packaging:** 0,5 kg - 1 kg

TAN UVASPEED

Tannin extracted from white grape skin. It increases wine softness and contributes to the overall balance of the wine.
Dosage: 3-20 g/hL - **Packaging:** 0.5 kg - 1 kg

UNICO RANGE

Unico is a unique 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 #1

Extracted from toasted oak selected for the quality and richness of its aroma, Unico #1 has the most intense vanilla-chocolate-toasted-oak aromas that you can experience from a tannin.
Dosage: 0.5-15 g/hL - **Packaging:** 250 g

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.
Dosage: 1-10 g/hL - **Packaging:** 250 g

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 slight oxidised and over-ripe aromas.
Dosage: 1-10 g/hL - **Packaging:** 250 g

CHOOSING THE RIGHT TANNIN

	COLOUR STABILITY	ANTIOXIDANT EFFECT	INCREASE OF AROMATIC CLEANLINESS	PROTEIN REMOVAL	STRUCTURE	ASTRINGENCY	SOFTNESS	AROMA INTENSITY	TYPES OF AROMAS
TAN BLANC	🍇	🍇🍇🍇🍇🍇	🍇	🍇	🍇🍇	🍇🍇	🍇	🍇	ELDERFLOWER
TAN CLAR	🍇🍇🍇	🍇🍇🍇	🍇🍇🍇	🍇🍇🍇🍇	🍇🍇🍇	🍇🍇🍇	🍇	🍇	WOOD
TAN CŒUR DE CHENE	🍇🍇	🍇🍇	🍇🍇	🍇	🍇🍇	🍇🍇	🍇🍇🍇	🍇🍇🍇🍇	VANILLA, CARAMEL, SPICES
TAN DARK CHOC-OLATE	🍇🍇	🍇🍇🍇	🍇🍇	🍇	🍇🍇🍇	🍇	🍇🍇🍇🍇	🍇🍇🍇🍇🍇	COCOA, TOASTED HAZELNUT, VANILLA
TAN E	🍇🍇🍇🍇🍇	🍇🍇	🍇🍇	🍇🍇🍇	🍇🍇🍇🍇🍇	🍇🍇🍇🍇	🍇🍇	🍇🍇🍇	GRAPE, FRESH FRUIT
TAN ELEGANCE	🍇🍇🍇🍇	🍇🍇🍇🍇	🍇🍇🍇	🍇🍇🍇🍇	🍇🍇	🍇	🍇🍇🍇🍇	🍇🍇🍇	WHITE FRUIT, WHITE FLOWERS
TAN ELEVAGE	🍇🍇	🍇🍇🍇	🍇🍇🍇	🍇🍇🍇🍇	🍇🍇🍇	🍇🍇🍇	🍇🍇	🍇🍇🍇	CARAMEL, LICORICE, VANILLA
TAN EXTRA	🍇🍇	🍇	🍇🍇	🍇	🍇🍇	🍇	🍇🍇🍇🍇	🍇🍇🍇🍇🍇	VANILLA, CARAMEL, COCOA, COFFEE
TAN FRESH FRUIT	🍇	🍇🍇🍇	🍇🍇	🍇🍇🍇	🍇🍇	🍇	🍇🍇🍇🍇	🍇🍇🍇🍇	LEMON, CITRUS, MINT, FRESH FRUIT
TAN FRUITAN	🍇🍇🍇🍇	🍇🍇🍇🍇	🍇🍇🍇	🍇🍇🍇🍇	🍇🍇🍇	🍇🍇🍇	🍇🍇🍇	🍇🍇🍇	RED FRUIT, SPICES
TAN MAX NATURE	🍇🍇🍇	🍇🍇	🍇🍇🍇🍇	🍇🍇	🍇	🍇	🍇🍇🍇🍇🍇	🍇	CAMOMILE
TAN MICROFRUIT	🍇🍇🍇🍇🍇	🍇🍇🍇	🍇🍇🍇	🍇🍇🍇	🍇🍇🍇	🍇🍇	🍇🍇🍇	🍇🍇🍇🍇	RED FRUIT, GRAPE, WOOD
TAN MICROX	🍇🍇🍇🍇🍇	🍇🍇🍇	🍇🍇🍇🍇	🍇🍇🍇🍇	🍇🍇🍇🍇🍇	🍇🍇🍇	🍇🍇	🍇🍇🍇	GRAPE, WOOD
TAN NAPA	🍇🍇	🍇🍇🍇	🍇🍇	🍇	🍇🍇🍇	🍇	🍇🍇🍇🍇	🍇🍇🍇🍇🍇	COCONUT, CARAMEL, COFFEE, COCOA
TAN RICH	🍇🍇🍇	🍇🍇	🍇🍇🍇	🍇🍇	🍇🍇	🍇🍇	🍇	🍇🍇	TOASTED WOOD, COFFEE, SPICES
TAN SKIN	🍇🍇🍇🍇	🍇🍇🍇	🍇🍇	🍇🍇🍇	🍇🍇	🍇🍇	🍇🍇	🍇🍇🍇🍇	GRAPE, TEA, WHITE FRUIT
TAN SLI	🍇🍇	🍇🍇🍇🍇🍇	🍇🍇🍇🍇	🍇🍇🍇	🍇🍇	🍇	🍇🍇🍇🍇	🍇🍇🍇🍇	OAK, COCONUT, VANILLA
TAN SUPEROAK	🍇🍇🍇	🍇🍇🍇	🍇🍇🍇	🍇🍇🍇	🍇🍇	🍇	🍇🍇	🍇🍇	LEMON, MINT, FRESH FRUIT

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CHOOSING THE RIGHT TANNIN

	COLOUR STABILITY	ANTIOXIDANT EFFECT	INCREASE OF AROMATIC CLEANLINESS	PROTEIN REMOVAL	STRUCTURE	ASTRINGENCY	SOFTNESS	AROMA INTENSITY	TYPES OF AROMAS
TAN TOTAL FRUITY	♦♦	♦♦	♦♦	♦♦♦	♦♦	♦	♦♦♦♦	♦♦♦♦	STRAWBERRY, PLUM, CHERRY, BERRIES
TAN TOFFEE	♦♦	♦♦♦	♦♦♦	♦	♦♦♦♦	♦♦	♦♦♦	♦♦♦♦	COFFEE, CARAMEL, TOASTED
TAN UVA	♦♦♦♦	♦♦♦	♦♦	♦♦♦♦	♦♦♦	♦♦♦♦	♦♦	♦♦♦♦♦	WHITE FRUIT
TAN UVASPEED	♦♦♦♦	♦	♦	♦	♦♦	♦	♦♦♦♦♦	♦♦♦♦	GRAPE, HONEY
UNICO #1	♦♦	♦♦	♦♦	♦	♦♦♦♦	♦	♦♦♦♦	♦♦♦♦ ♦♦♦	VANILLA, COCOA, TOASTED WOOD, SPICES
UNICO #2	♦♦♦	♦♦♦	♦♦	♦♦	♦♦♦♦	♦	♦♦♦♦♦♦	♦♦♦♦ ♦♦♦	RED FRUIT, WILD BERRIES, CHERRY
UNICO #3	♦	♦♦♦♦	♦♦♦♦♦	♦♦	♦♦	♦	♦♦♦♦	♦♦♦♦ ♦♦♦	RED FRUIT, WILD BERRIES, CHERRY
TAN VANILLA	♦♦	♦♦♦	♦♦♦	♦	♦♦♦♦	♦♦	♦♦♦	♦♦♦♦	VANILLA, COCONUT, CREAM

POLYSACCHARIDES

Enartis

POLYSACCHARIDES

SURLÌ NATURAL

Inactivated yeast selected for replacing natural lees and simulates the effect of *sur lies* ageing.
Dosage: 20-40 g/hL - **Packaging:** 2,5 kg - 25 kg

SURLÌ ONE

Inactivated yeast enzymatically activated for accelerating the lysis and getting in four weeks the effect of a *sur lies* ageing.
Dosage: 20-40 g/hL - **Packaging:** 2,5 kg

SURLÌ ROUND

Complex made of inactivated yeast, condensed and ellagic tannins. It improves red and rosé wines' antioxidant protection, balance and aroma cleanliness.
Dosage: 20-40 g/hL - **Packaging:** 2,5 kg

SURLÌ ELEVAGE

Yeast hulls rich in free and immediately available mannoproteins, for increasing wine softness, balance and stability in only 24 hours.
Dosage: 5-30 g/hL - **Packaging:** 1 kg

SURLÌ VITIS

Completely soluble, Surlì Vitis provides plant polysaccharides and white grape skin tannin. Effective for enhancing wine softness, mouthfeel and perceived sweetness.
Dosage: 2-15 g /hL - **Packaging:** 1 kg

SURLÌ VELVET

Completely soluble yeast polysaccharides designed to increase wine physical stability, mouthfeel, softness and aromatic complexity.
Dosage: 0,5-5 g/hL - **Packaging:** 0,5 kg

SURLÌ VELVET PLUS

Soluble yeast polysaccharides extracted from a strain with high production of sulphur peptides. It displays the same effects of Surlì Velvet with the addition of an antioxidant activity that helps prolong the shelf life of wine.
Dosage: 1-10 g/hL - **Packaging:** 0,5 kg

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

Enartis

CHIPS AND MINISTAVES

INCANTO NATURAL
Chips produced from untoasted French oak, for enhancing the fruity aroma without overshadowing the varietal character.
Format Chips

INCANTO SLI NEW
Untoasted American oak chips. It enhances the varietal fruit aroma, improves mouthfeel and prolongs wine life.
Format Chips

INCANTO CREAM
Chips from medium toasted French oak. It gives a pleasant and complex sweet aroma and taste.
Format Chips - Ministaves - Barrel Boost

INCANTO SPECIAL FRUIT
Medium toasted French oak chips. It provides complex spicy notes that enhance the fruitiness of the wine.
Format Chips - Ministaves - Barrel Boost

INCANTO VANILLA
Medium toasted American oak chips, for an intense vanilla, coconut and bourbon profile.
Format Chips - Ministaves - Barrel Boost

INCANTO CARAMEL
Chips produced from medium toasted French oak. It gives a caramel, cappuccino aroma while increasing sweetness at the palate.
Format Chips - Ministaves - Barrel Boost

INCANTO BRQ
Medium plus toasted French oak chips. It reproduces the effect of barrel ageing increasing wine structure and aroma complexity without overshadowing the varietal identity.
Format Chips

INCANTO SPICE
Blend of French and American oak treated with different toasting process. It gives a very complex and intense spice aroma. Best results with Pinot Noir, Syrah, Cabernet Sauvignon, Sangiovese and Primitivo.
Format Chips

INCANTO SWEET
Medium toasted French oak, it gives softness and sweetness at the palate, sweet aroma at the nose.
Format Chips

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.

CHIPS AND MINISTAVES

INCANTO TOFFEE

Medium plus toasted French oak chips. It gives a very complex aroma of cafè macchiato, toasted almond and vanilla.
Format Chips - Ministaves - Barrel Boost

INCANTO COMPLEXITY

Heavy toasted French oak. It enhances structure and aromatic complexity without making the wine lose its personality.
Format Chips

INCANTO DARK CHOCOLATE

Chips produced from heavy toasted French oak. It impacts wine aroma by bringing intense notes of chocolate, cocoa and black coffee.
Chips – Ministaves – Barrel Boost

SOLUBLE ALTERNATIVES TO OAK

INCANTO N.C. SLI NEW

Blend of tannin extracted from untoasted American oak and yeast derivative for enhancing wine antioxidant protection and shelf life.
Dosage: 10-30 g/hL - **Packaging:** 2.5 kg

INCANTO: OAK ALTERNATIVES RANGE

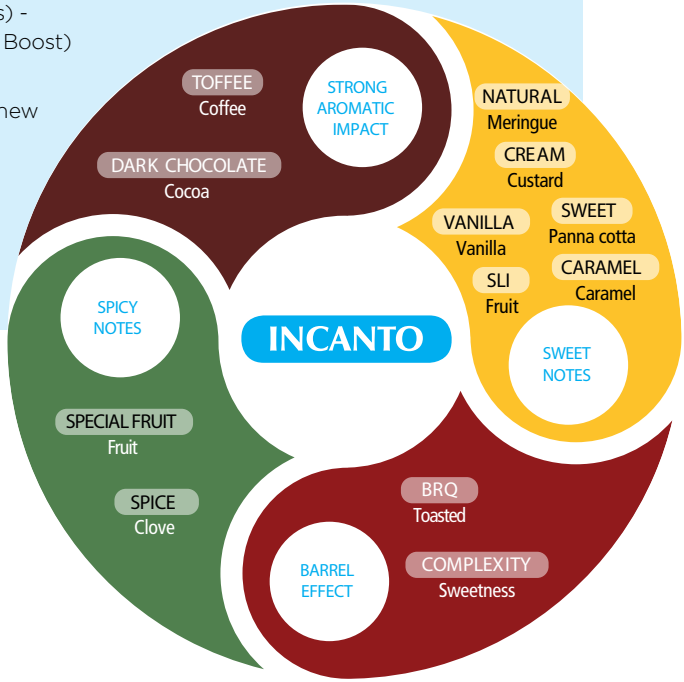
Produced from selected wood of French and American oak, **INCANTO** woods are toasted using a unique and original process that employs a progressive heating scheme which results in a deep and homogenous toast. The Incanto alternatives are available in sizes chips (2-4 mm), ministaves (about 25 cm lenght x 2.7-5 cm width x 0.9 cm thickness and Barrel Boost (single use system for barrels).

APPLICATION: increase aroma complexity - increase mouthfeel and structure

DOSAGE: Chips: 1-4 g/L white wines;
1-6 g/L red wines.
Ministaves: 1-5 g/hL.

PACKAGING: 10 kg (chips and ministaves) - bag containing a single use chain (Barrel Boost)

BARREL BOOST: one chain per barrel (corresponding to the addition of 25% new toasted oak).



MICRO-OXYGENATION

Enartis

MICRO-OXYGENATION

ENARTIS MICROOX

Oxygen doser for micro- and macro-oxygenation of wine and must. It accurately measures the effective flow rate in weight (mg/L) of oxygen delivered.

WHAY USE OXYGEN?

Oxygen is an important ingredient in the production of wine. When added without control, it can cause major problems; however, if used properly, it becomes an important tool in the production of quality wines and for different wine styles intended to meet specific needs of the market.

FINING AGENTS

Enartis

FINING AGENTS FREE FROM ANIMAL PROTEINS

CLARIL AF

A blend containing bentonite, PVPP, plant protein and silica. It is recommended for the elimination of phenolic compounds responsible for oxidation and bitterness and for the improvement of protein stability.
Dosage: 20-80 g/hL - **Packaging:** 1 kg - 10 kg

CLARIL QY

Fining complex made of yeast derivative and chitosan. Very effective in reducing astringency and improving clarity without affecting wine structure.
Dosage: 5-20 g/hL - **Packaging:** 1 kg - 10 kg

COMBISTAB AF

Complex containing PVPP, plant protein and silica. Highly effective in the prevention and treatment of oxidation, pinking and the reduction of bitterness.
Dosage: 10-50 g/hL - **Packaging:** 1 kg - 10 kg

PLANTIS AF

This pure pea protein allows wine clarification while producing a small volume of lees. It removes polyphenols responsible for wine oxidation and bitterness.
Dosage: 10-30 g/hL - **Packaging:** 20 kg

PLANTIS AF-P

Pure potato protein. It assures a nice clarification, refreshes the colour and improves wine sensory.
Dosage: 5-20 g/hL - **Packaging:** 1 kg - 10 kg

PLANTIS AF-Q

Preparation made of pea protein and activated chitosan. It clarifies while forming small, compact lees and improves wine resistance to oxidation.
Dosage: 5-30 g/hL - **Packaging:** 1 kg - 10 kg

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.

PROTEIN-BASED FINING AGENTS

ATOCLAR M
Food grade, cold soluble gelatine, for clarifying and reducing tannin content in juice and wine.
Dosage: 2-15 g/hL - **Packaging:** 20 kg

BLANCOLL
Pure egg albumin in powder form.
Dosage: 5-10 g/hL - **Packaging:** 1 kg

FINECOLL
Granular isinglass soluble in cold water for a deep but gentle clarification.
Dosage: 1-4 g/hL - **Packaging:** 250 g - 1 kg

FINEGEL
200 g/L solution of fish gelatine.
Dosage: 20-100 mL/hL - **Packaging:** 20 kg

GOLDENCLAR
Hot soluble gelatine in sheet form for the clarification of high-quality wine. Ideal alternative to egg albumin.
Dosage: 2-15 g/hL - **Packaging:** 1 kg

GOLDENCLAR INSTANT
High molecular-weight, food-grade gelatine that can be dissolved in water at room temperature. Ideal alternative to egg albumin.
Dosage: 2-12 g/hL - **Packaging:** 1 kg - 15 kg

GREEN GELATINA
Pure hot soluble gelatine, organic certified in accordance with European legislation.
Dosage: 2-15 g/hL - **Packaging:** 1 kg

HYDROCLAR 30
30% Liquid solution of medium hydrolysed food grade gelatine.
Dosage: 10-60 ml/hL
Packaging: 1 kg - 25 kg - 1000 kg

HYDROCLAR 45
45% Liquid solution of low molecular weight food grade gelatine.
Dosage: 7- 40 mL/hL - **Packaging:** 25 kg - 1000 kg

PROTOCLAR
Pure potassium caseinate in granulated form.
Dosage: 20-100 g/hL - **Packaging:** 1 kg - 25 kg

PULVICLAR S
Food grade, warm soluble gelatine, for deep but gentle clarification of juice and wine.
Dosage: 2-15 g/hL - **Packaging:** 1 kg - 20 kg

INORGANIC FINING AGENTS

BENTOLIT SUPER
Activated sodium bentonite powder for improving white and rosé wines' protein stability.
Dosage: 20-120 g/hL - **Packaging:** 25 kg

PLUXBENTON N
Natural sodium bentonite in granular form that combines excellent clarification with good protein removal. Recommended for preventing the "lightstruck" defect.
Dosage: 20-120 g/hL - **Packaging:** 1 kg - 20 kg

PLUXCOMPACT
Bentonite that is very effective in removing proteins with a small amount of lees. Recommended for eliminating unstable colour compounds.
Dosage: 20-120 g/hL - **Packaging:** 20 kg

PHARMABENT
Bentonite of pharmaceutical quality. Thanks to its large surface, it has a great deproteinizing capacity already at low doses.
Dosage: 5-10 g/hL - **Packaging:** 5 kg

SIL FLOC
Pure silicon dioxide in aqueous solution.
Dosage: 25-75 mL/hL
Packaging: 25 kg – 1000 kg

CORRECTIVE AND COMPLEX FINING AGENTS

BLACK PF
Oenological activated carbon in damp form. Highly effective in decolourising and in removing ochratoxin A.
Dosage: 20-100 g/hL - **Packaging:** 15 kg

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.
Dosage: 30-50 g/hL - **Packaging:** 2,5 kg - 20 kg

ENOBLACK SUPER
Decolorizing carbon in powder form.
Dosage: 20-100 g/hL - **Packaging:** 1 kg

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.
Dosage: 20-40 g/hL - **Packaging:** 10 kg

REVELAROM
Granulated fining mixture containing copper, to be used for treating and preventing appearance of sulfides or reductive characters.
Dosage: 5-20 g/hL - **Packaging:** 1 kg

STABYL
Pure polyvinylpolypyrrolidone in powder form.
Dosage: 5-30 g/hL - **Packaging:** 1 kg - 20 kg

STABYL G
Pure polyvinylpolypyrrolidone in granular form for a better ease of use.
Dosage: 5-30 g/hL - **Packaging:** 1 kg - 20 kg

STABYL MET
Co-polymer of PVI/PVP and silica. It prevents oxidation, browning, pinking and formation of haze by removing the main catalysts of oxidation, iron and copper.
Dosage: 30-50 g/hL - **Packaging:** 1 kg - 20 kg

CLARIL SP
Complex clarifying agent consisting of bentonite, PVPP, potassium caseinate and silica. It is recommended for the prevention and correction of wine oxidation.
Dosage: 20-80 g/hL - **Packaging:** 10 kg

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.
Dosage: 40-100 g/hL - **Packaging:** 1 kg - 25 kg

	CLARIFICATION	IMPROVE FILTRATION	REDUCE ASTRINGENCY	REMOVE BITTERNESS	REMOVE THE HERBACEOUS NOTES	TREAT SULPHUR OFF-AROMAS	REMOVE VOLATILE PHENOLS	REMOVE CATECHINS	IMPROVE PROTEIN STABILITY	TREAT/PREVENT OXIDATION	REMOVE METALS	REMOVE UNSTABLE COLOUR	REVEAL FRUIT NOTES	PREVENT LIGHT-STRUCK DEFECTS	PREVENT PINKING
ATOCLAR M	recommended		highly recommended												
BENTOLIT SUPER	highly recommended								highly recommended						
BLACK PF								highly recommended		highly recommended					
CLARIL AF	highly recommended	highly recommended		highly recommended				highly recommended	recommended	highly recommended		highly recommended			highly recommended
CLARIL HM				recommended						highly recommended	highly recommended				highly recommended
CLARIL QY			recommended	highly recommended								highly recommended			
CLARIL SP	recommended			highly recommended					recommended	recommended			recommended		highly recommended
COMBISTAB AF				highly recommended				highly recommended		highly recommended					recommended
ENOBLACK SUPER								highly recommended		highly recommended					
FENOL FREE							highly recommended								
FINECOLL	highly recommended	highly recommended		highly recommended	recommended										
FINEGEL	recommended		highly recommended												
GOLDENCLAR	highly recommended	highly recommended	recommended												
GOLDENCLAR INSTANT	highly recommended	highly recommended	recommended									highly recommended			
GREEN GELATINA	highly recommended	highly recommended	recommended												

highly recommended recommended

FINING AGENTS
Enartis

	CLARIFICATION	IMPROVE FILTRATION	REDUCE ASTRINGENCY	REMOVE BITTERNESS	REMOVE THE HERBACEOUS NOTES	TREAT SULPHUR OFF-AROMAS	REMOVE CATECHINS	IMPROVE PROTEIN STABILITY	TREAT/PREVENT OXIDATION	REMOVE METALS	REMOVE UNSTABLE COLOUR	REVEAL FRUIT NOTES	PREVENT LIGHT-STRUCK DEFECTS	PREVENT PINKING
HYDROCLAR 30	highly recommended		recommended											
HYDROCLAR 45	recommended		highly recommended											
NEOCLAR AF	highly recommended				recommended				recommended		recommended	highly recommended		
PHARMABENT	highly recommended							highly recommended					recommended	
PLANTIS AF			recommended	recommended			highly recommended		recommended					
PLANTIS AF-P			recommended	recommended			highly recommended		recommended					
PLANTIS AF-Q	recommended						highly recommended							
PLUXBENTON N	highly recommended							highly recommended					recommended	
PLUXCOMPACT	highly recommended	highly recommended						highly recommended			highly recommended		recommended	
PROTOCLAR	recommended			highly recommended	highly recommended		highly recommended		highly recommended					highly recommended
PULVICLAR S	highly recommended	highly recommended	recommended											
REVELAROM						highly recommended								
SIL FLOC		highly recommended												
STABYL G				highly recommended	highly recommended		highly recommended		highly recommended		highly recommended			highly recommended
STABYL MET									highly recommended	highly recommended				highly recommended

highly recommended recommended

SUGGESTIONS FOR A SUCCESSFUL FINING

- Slowly distribute fining agents to at least half of the total volume of wine. Systems to aid complete dispersal are essential. If possible, incorporate fining agents using a Venturi tube or dosing pump during pump-over or racking.
- Avoid prolonged use of mechanical stirrers, which can delay the flocculation process.
- Aeration is important for flocculation as it modifies the redox potential in wine. Using Venturi systems allows for slight aeration.
- When flocculation aids are used, the order of addition should always be tannin before gelatine – if possible one day earlier; bentonite and silica sol should be added before protein fining agents when treating free-run must and wine.
- If there is a risk of overfining with protein fining agents, always end the sequence with bentonite.
- Always allow one or two hours to elapse between additions.
- Fining solutions must be used immediately after preparation (allowing only for swelling times, if applicable.).
- If solutions need to be used over two or more days, add 2 g/L of potassium metabisulphite to the solution to inhibit microbial growth. Never store prepared solutions for more than one week.
- Protein fining agents should not remain in wine for more than 10-15 days in the case of gelatine, casein and egg albumin, and 3-4 weeks in the case of isinglass.
- Avoid temperature differentials in tanks to which fining agents have been added – these create convective movements within the tank that delay the settling of lees.
- Protein fining agents work best at low temperatures: 10°C for gelatine and up to 5°C for isinglass.
- Bentonite works best at temperatures higher than 10°C.

CONTROL OF THE RESULTS

Trials are essential for evaluating the efficacy of a treatment. Fining agents, as well as the concentration ranges used for a trial, should be selected on the basis of the change that is desired in the wine. It is important to test several rates and select the lowest dosage needed to achieve the desired effect to avoid over-fining.

For fining trials intended to modify organoleptic properties of wine, the most important test of all is a properly conducted sensory evaluation of fined samples against an untreated control. Additionally, there are several tests that winemakers can use to cross-reference with their sensory evaluation.

ANALYTICAL EVALUATION OF FINING RESULTS

Clarity	Turbidimeter or naked eye
Colour	Abs 420, 520 and 620 nm (colour intensity and colour hint)
Poliphenol content	Abs 280 nm
Filterability	Fouling index and/or Vmax
Protein stability	Heat test
Colour stability	24 hrs at 0°C, microscope observation of the sediment
Overfining	Addition of tannin
Lees volume	Cone or cylinder

STABILISING AGENTS

Enartis

GUM ARABIC

AROMAGUM

Liquid solution of Gum Arabic for the stabilisation of wines' aroma. It enhances the perception of fresh and fruity aromas and maintains the freshness characteristic in the wine after bottling.
Dosage: 50-100 mL/hL
Packaging: 10 kg - 25 kg - 1000 kg

CITROGUM

The most filterable Gum Arabic in liquid solution in the market. Improves wine softness and tartrate stability.
Dosage: 50-200 mL/hL
Packaging: 1 kg - 10 kg - 25 kg - 1000 kg

CITROGUM DRY

Granulated and easy to dissolve version of Citrogum. It preserves the same features of the liquid form: complete filterability, effectiveness for wine tartrate stabilisation, capability of improving wine softness.
Dosage: 10-100 g/hL - **Packaging:** 15 kg

GREEN GOMMA

Gum Arabic Verek in powder form obtained organic certified in accordance with European legislation. Recommended for red wine colour stability.
Dosage: 10-50 g/hL - **Packaging:** 1 kg

MAXIGUM

Solution of Gum Arabic Verek for colour stabilisation of red wines.
Dosage: 30-100 mL/hL
Packaging: 10 kg - 25 kg - 200 kg - 1000 kg

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.

TARTRATE STABILISING AGENTS

AMT PLUS QUALITY

Pure metatartaric acid with high esterification rate.
Dosage: 5-10 g/hL - **Packaging:** 1 kg - 25 kg

CELLOGUM L

CMC in a 5% water solution.
Dosage: 100-200 mL/hL
Packaging: 25 kg - 1000 kg

CELLOGUM LV 20

Liquid preparation containing 20% CMC. The most filterable and the easiest to use on the market.
Dosage: 25-50 mL/hL
Packaging: 25 kg - 1000 kg

STAB CLK+ NEW FORMULA

Mannoproteins efficiency reinforced by KPA tartrate stabilisation effect make the new CLK+ formula even more performant in preventing potassium bitartrate precipitation in bottle.
Dosage: 5-15 g/hL - **Packaging:** 0,5 kg

ZENITH UNO

Solution of potassium polyaspartate A-5D K/SD for full tartaric stabilisation of white, rosé and colour stable red wines.
Dosage: 100 mL/hL
Packaging: 5 kg - 20 kg - 1000 kg

ZENITH COLOR

Solution of potassium polyaspartate A-5D K/SD and Gum Arabic Verek for full colour and tartaric stabilisation.
Dosage: 200 mL/hL
Packaging: 5 kg - 20 kg - 1000 kg

ZENITH PERLAGE

Solution of A-5D K/SD potassium polyasparate and mannoproteins. It guarantees perfect tartaric stabilisation and prolongs the shelf life of sparkling wines perlage.
Dosage: 100 mL/hL - **Packaging:** 20 kg - 1000 kg

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.
Dosage: 2-15 g/hL - **Packaging:** 0,5 kg - 10 kg

STAB MICRO M

Bioregulator 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.
Dosage: 10-40 g/L - **Packaging:** 1 kg - 10 kg

REFRIGERATION AGENTS

ENOCRISTAL SUPERATTIVO

Rapid crystalliser for cold stabilisation of tartrates. It accelerates precipitation of potassium bitartrate during cold treatment without affecting wine acidity.
Dosage: 30-40 g/hL - **Packaging:** 1 kg - 15 kg

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.
Dosage: 20-40 g/hL - **Packaging:** 2,5 kg - 10 kg

CITROSOL rH

Blend of potassium metabisulphite, citric and ascorbic acid. It is a powerful antioxidant that prevents wine spoilage due to contact with air.
Dosage: 10-50 g/hL - **Packaging:** 250 g - 1 kg

CITROSTAB rH

Pre-bottling coadjunct based on powerful antioxidant compounds that protects wine from undergoing alteration such as pinking, white haze and atypical aging.
Dosage: 10-50 g/hL - **Packaging:** 1 kg

SORBOSOL K

Pre-bottling stabiliser containing potassium sorbate, potassium metabisulphite and L-ascorbic acid for wine antioxidant and antimicrobial protection.
Dosage: 20-40 g/hL - **Packaging:** 1 kg

SULFITING AGENTS

Enartis

SULFITING AGENTS

EFFERGRAN/ EFFERGRAN DOSE 5/ EFFERBARRIQUE

Effervescent, granulated potassium metabisulphite. When added to wine, it rapidly dissolves and assures a homogenous distribution of the released SO_2 without requiring pump-overs in tank volumes of up to 50 000 litres.
Dosage: each package of Efferbarrique releases 2 grams of SO_2
each package of Effergran Dose 5 releases 5 grams of SO_2
125 g packet of Effergran releases 50 grams of SO_2
250 g packet of Effergran 100 grams of SO_2

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%.
Packaging: 250 g - 1 kg - 25 kg

AST

Blend of potassium metabisulphite, ascorbic acid and gallic tannin in carefully balanced amounts to maximise antioxidant and antimicrobial action. Very effective in preventing atypical ageing off-flavours.
Dosage: 15 - 20 g/hL - **Packaging:** 1 kg

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.
Packaging: 25 kg – 250 kg – 1000 kg

ZOLFO DISCHI

Sulphur tablets for the sanitisation of barrels and wooden casks.
Packaging: 1 kg

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.

SPARKLING WINE PRODUCTION

Enartis

BASE WINE TREATMENT

ENOBLACK PERLAGE

Compact pellet form decolourizing carbon, for an easy base wine decolouration without dust.
Dosage: 5-100 g/hL - **Packaging:** 15 kg

CLAIRPERLAGE UNO

A blend of selected bentonites and plant proteins, suitable for the protein stabilization of base wines all while respecting their foaming properties.
Dosage: 20-100 g/hL - **Packaging:** 10 kg

CLAIRPERLAGE DUE

It refreshes the base wine by eliminating polyphenols responsible for oxidation, bitterness and excessive colour.
Dosage: 15-40 g/hL - **Packaging:** 1 kg - 10 kg

YEAST

FERM PERLAGE DOCG

It assures the production of wines characterized by a very clean aroma and an elegant and fresh palate. Recommended for Charmat method.
Dosage: 10-20 g/hL - **Packaging:** 0,5 kg

FERM PERLAGE

Strong fermenter that can withstand extreme condition of pH, temperature and pressure. It gives wines a great finesse. Recommended for traditional method.
Dosage: 10-20 g/hl - **Packaging:** 0,5 kg

FERM PERLAGE FRUITY

Very aromatic strain recommended for the production of attractive fresh, fruity wines.
Dosage: 15-40 g/hL - **Packaging:** 1 kg - 10 kg

The production of sparkling wines requires the use of specific tools that can add value to the winemaker's expertise and to the quality of the wines produced. Enartis offers a range of products that were developed to help the winemaker direct and achieve a desire style; from the production of base wine to the second fermentation and up to disgorging process.

YEAST NUTRITION

NUTRIFERM PDC

Specific for the *pied de cuve* preparation. Yeast derived, it creates the conditions for a regular fermentation all while limiting the production of H_2S and volatile acidity.
Dosage: 15-30 g/hL - **Packaging:** 1 kg

NUTRIFERM PDC AROM

100% yeast derived nutrient for *pied de cuve* preparation. It stimulates the production of fresh and fruity aromas.
Dosage: 20 g/hL - **Packaging:** 1 kg

NUTRIFERM TIRAGE

Nutrient for the second fermentation with both traditional and Charmat methods. It provides essential organic and inorganic nitrogen as well as survival factors.
Dosage: 5-20 g/hL - **Packaging:** 1 kg

NUTRIFERM REVELAROM

Specific nutrient for the second fermentation. It supplies yeast with the necessary elements to ensure a regular fermentation and limit the appearance of light sulphur compounds.
Dosage: 5-15 g/hL - **Packaging:** 1 kg

NUTRIFERM GRADUAL RELEASE

The easiest way to feed yeast during the second fermentation in tank! This blend of DAP and tannins is contained in a special bag that gradually releases its content.
Packaging: 1 kg bag for 50 – 100 hL base wine - 5 kg bag for 250 - 500 hL base wine

RIDDLING AGENTS

CLAIRBOUTEILLE P

Blend of selected bentonites, developed to ease fining and to give compact and little sediment, both with automatic and manual riddling.
Dosage: 5-10 g/hL - **Packaging:** 250 g

TAN CLAIRBOUTEILLE

Blend of gallic and ellagic tannins. When used together with Clairbouteille P, it helps clarification and the formation of compact lees.
Dosage: 1-5 g/hL - **Packaging:** 1 kg

SENSORY IMPROVEMENT

SURLÌ MOUSSE

Yeast derivative rich in mannoproteins that is used to improve the bubbling properties of sparkling wines during the second fermentation.
Dosage: 10-15 g/hL - **Packaging:** 1 kg

SURLÌ TAN PERLAGE

Rich in free mannoproteins and tannins, it was designed to improve the structure and persistence of thin wines.
Dosage: 5-20 g/hL - **Packaging:** 1 kg

TAN FINESSE

Made of condensed tannins, it reduces the herbaceous notes and improves sparkling wine harmony and aromatic quality.
Dosage: 3-10 g/hL - **Packaging:** 1 kg

TAN FRAGRANCE

Tannin extracted from wood of fruit trees, when used during the second fermentation it develops fruity aromas that improve wine complexity and protects wine from oxidation.
Dosage: 1-8 g/hL - **Packaging:** 1 kg

TAN STYLE

Oak tannin, aromatically neutral, very soft and giving just a little structure, it is used to limit the appearance of sulphur compounds during the second fermentation.
Dosage: 1-10 g/hL - **Packaging:** 1 kg

TAN LAST TOUCH

Blend of tannins extracted from oak and grape skins. When used in the *liqueur d'expédition* it opens wines that need to be quickly ready for consumption.
Dosage: 0,5-5 g/hL - **Packaging:** 1 kg

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