

Let's define sensations

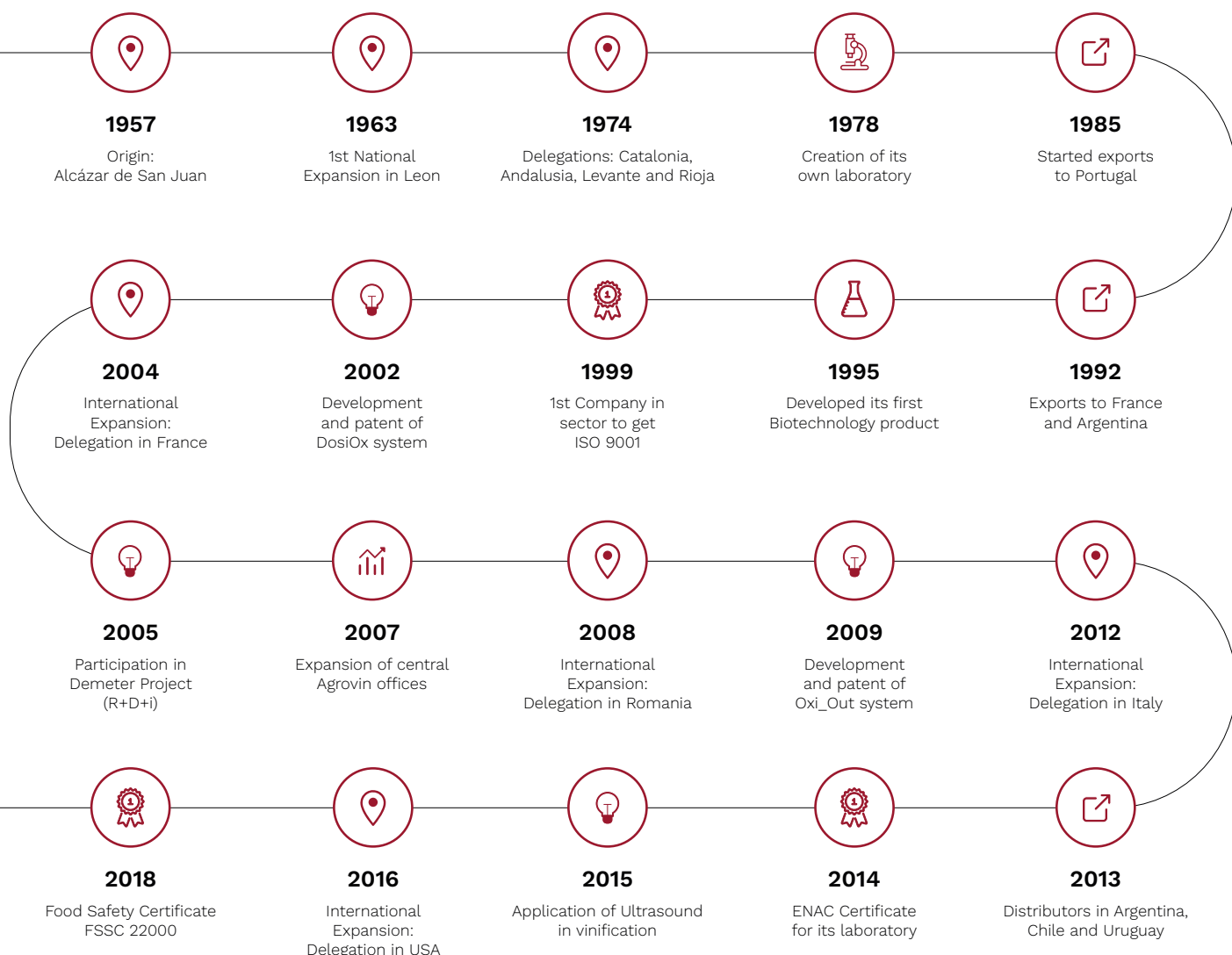
Vol. II





“We work by and for the wineries”.

Agrovin Group. More than 65 years of history with you



Units of Business

- Biotechnology
- Oenological specialties
- Wine Technology
- Machinery
- Laboratory

Sectors



Technology

36 national and
international patents

- Ultrawine Perseo
- DosiOx
- Oxi-Out
- Ulises TDR²



Laboratory

35.000 oenological
analyses each year

+5.800 bottles of
wine analysed



R+D+i

33 research projects
in 18 years

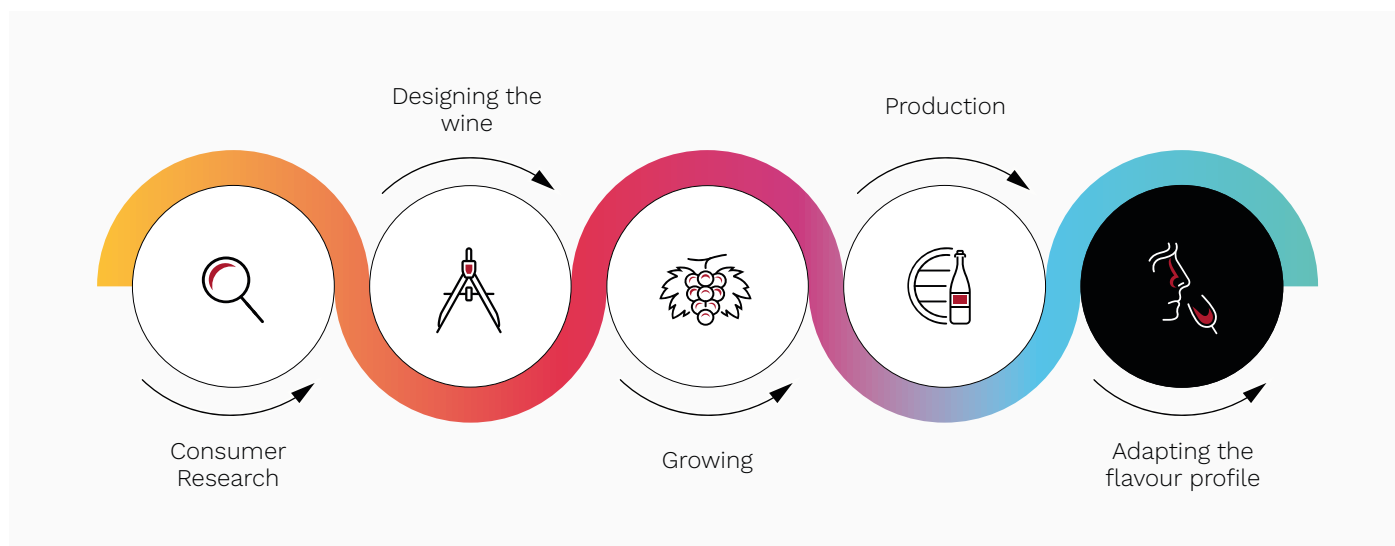
+35 m€ invested in
the projects

Determining the character of the wine

In a market as competitive as the wine market, it is no longer sufficient to simply create a quality product, because what a consumer perceives as quality varies depending on cultural factors, nationality, age or even the season of the year.

Currently, **we must identify the tastes of the consumer** we are targeting even before harvesting the grapes. This prior knowledge of the wine profile we need will help guide us through the production and refining of the wine until it meets the demands of the consumer.

At Agrovin, we help the oenologist **determine the wine's character, proposing solutions through every step of the development process.**



The flavour profiles of wine nowadays are varied, although there are a number of trends which, although seemingly impossible, can coexist in the markets:

- Wines aged in wood, but where the fruit is preserved
- Structured, astringency-free wines
- Wines lacking in structure but very fruity
- Sugar-free wines, but with some sweetness.
- Long-life wines, yet sulphite-free.
- Wines which are not only ecologically friendly, but also suitable for vegans.

These attributes can be treated separately, but what makes a **great wine** is that these combinations, which at first may seem impossible, are balanced, that there is a **balance between the aromatic sensations** that we feel on the nose, with the **tactile sensations** that we feel on the mouth when tasting wine.

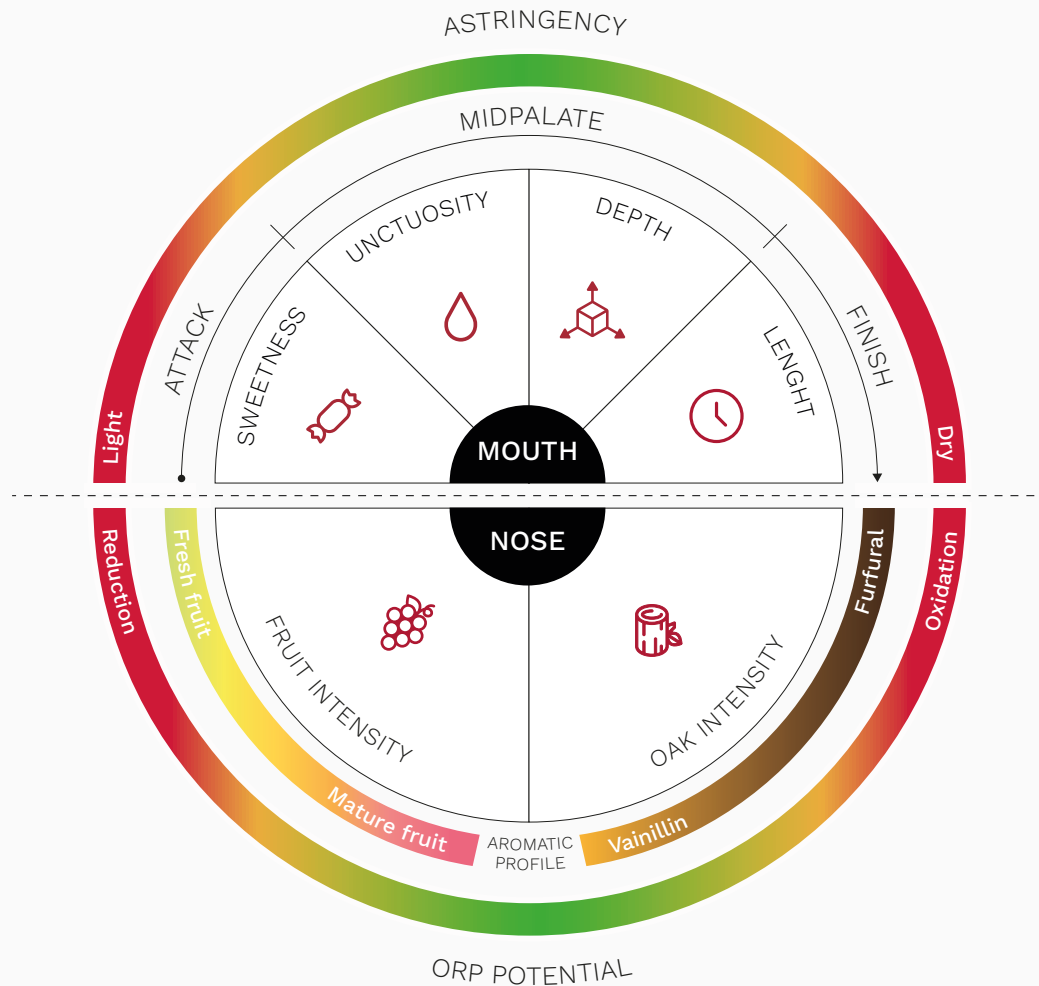
Balance between tactile and aromatic sensations

In wine, the aromatic and tactile sensations are the fundamental pillars of the taste experience. There must be a balance between them that allows the two phases to come together and enhance each other to form a great wine.

The aromatic profile not only participates in the olfactory phase but is also significant during the taste phase. Intense and persistent aromas are involved in this phase from start to finish, enhancing the sweetness of the **mouthfeel**, intensifying the **centre** of the wine and being the main component in the final **phase**.

At Agrovín, we have designed a **sensations map** that makes it possible to graphically represent the taste phase of the wine and observe which attributes we should modify to achieve balance.

With this system, we facilitate decision-making when defining the character of the wine.



Online Sensations Map

Scan this QR code and create your own sensations map. Tool designed by Agrovín.

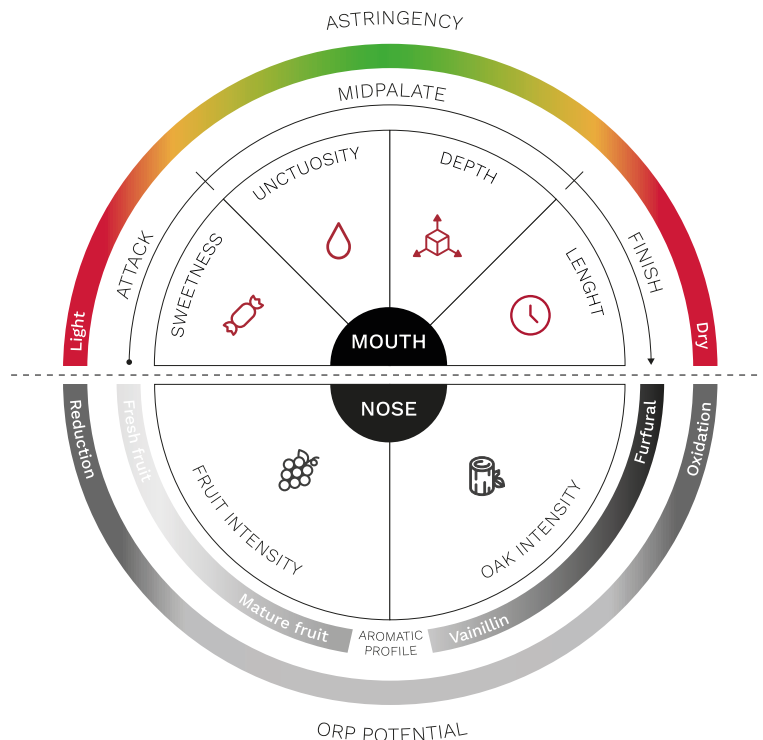
Tactile sensations

The different phases of the mouth must be balanced to make a truly elegant wine. On a taste level, the sweetness must be balanced by the acidity, the unctuousness must be in harmony with the astringency, and the astringency cannot prevail in the structure.

This series of sensations occurs in an orderly manner:

- **Attack:** the first thing we feel is the sweetness.
- In the **centre** of the mouth: the sensation is Unctuousness and Amplitude.
- **Finish:** The sensations that remain in the mouth once we have swallowed the wine are its Length, defined as the aromatic persistence of high intensity.

If we know which compounds influence each phase, we can influence each of them separately.



Astringency and tactile sensations

We understand astringency as the sensation of dryness that occurs in the mouth when the saliva reacts with the tannins in the wine. If not compensated for, this can spoil the tasting experience.

Astringency depends mainly on the tannic structure, but this sensation can be increased or reduced by interaction with other factors, such as acidity, temperature, alcoholic strength and residual sugar.

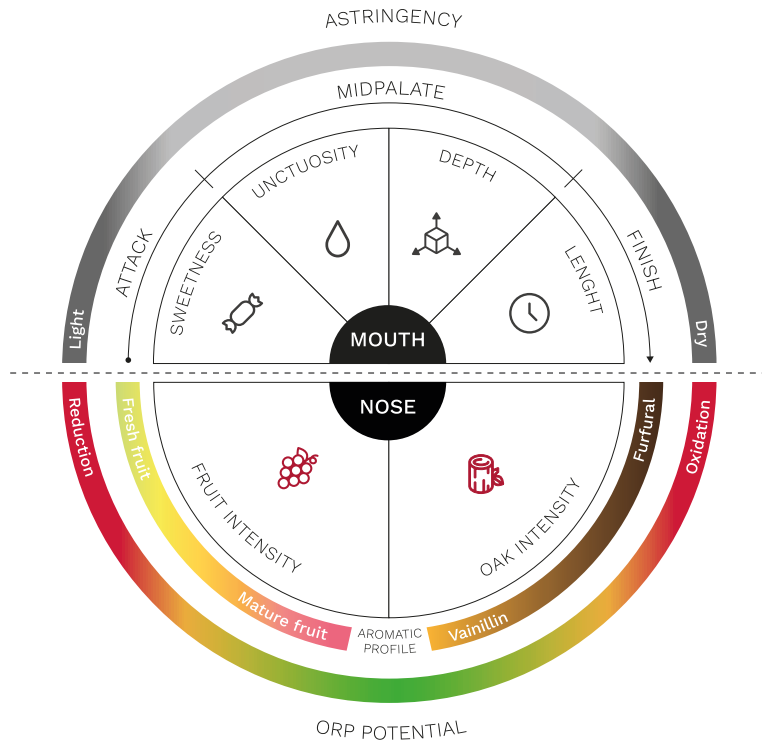
Consult our Workshop Modulation of the astringency

Scan this QR code to watch the video and find more information on the factors determining astringency during fermentation and the wine, once completed.



A chat with **Federico Cassasa**, Associate Professor of Oenology and Wine Sensory Analysis at the **Polytechnic University of the State of California**.

Aromatic sensations



In the nose, the Fruit-Wood profile must be adjusted and balanced to compensate for the **intensity** of one or the other depending on the **wine profile** we want to produce.

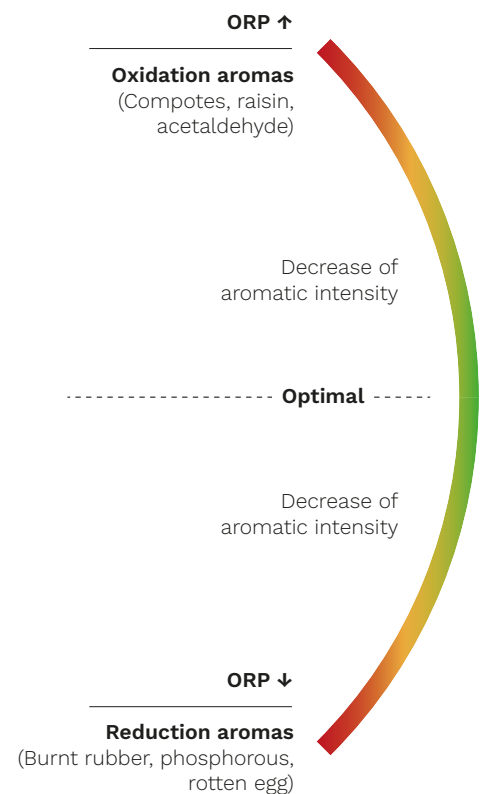
Within the **fruit**, there must be an adequate balance with respect to maturity, where fresh aromas such as thiols or citrus fruits can coexist with more mature aromas, such as compotes and jams.

The **wood**, in turn, also needs a balance between sweeter aromas such as vanilla or coconut and other more toasted scents such as coffee and smokey aromas.

Oxidation-Reduction and aromatic potential

To appreciate the essence of a wine, there must be nothing that distorts its perception. The aromatic power of a wine will be influenced by the redox situation of the wine at the time of consumption.

- **Notes on oxidation:** The fresh and fruity aromas have given way to other compotes, and in some cases, the presence of acetaldehyde prevents the perception of others.
- **Decrease in intensity:** This decrease in aromatics occurs at the beginning of the oxidation, where the aromatic compounds cease to be perceptible when oxidised and at the beginning of the reduction processes, whose step prior to the reduced aroma is a significant aromatic decrease, where the resulting wine is sometimes called "closed".
- **Notes on reduction:** The high level of sulphur compounds and excessively low electrochemical potential values cause characteristic aromas of reduction to appear in the wine.



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— Fresh fruit

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— Ripe fruit

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— Fruit from oak

Spirit Smoothie	P. 13
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Oak profile

— Defined oak profile

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— Light roast

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— Medium roast

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— Sweetness

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01. Aromatic sensations

Aromatic sensations that are perceived in a wine include: the aromatic profile, which is comprised of the different descriptors that can be found during the tasting, the intensity with which they can be perceived and the relationship between them, in other words, the complexity.

All these factors can be represented graphically, allowing for an “observation” of how a wine smells.

- The **intensity** of a wine is the degree in which we can perceive its aromatic expression. Wines with a high intensity are perceived without difficulty. On the contrary, wines with low intensities will be more difficult to perceive, even if we shake the glass.
- The **aromatic profile** refers to the specific aromas that appear in the wine. The fruit and wood descriptors come together to create complexity both in the olfactory phase and in the aftertaste.

Fruit profile

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Oak profile

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Oxidation process

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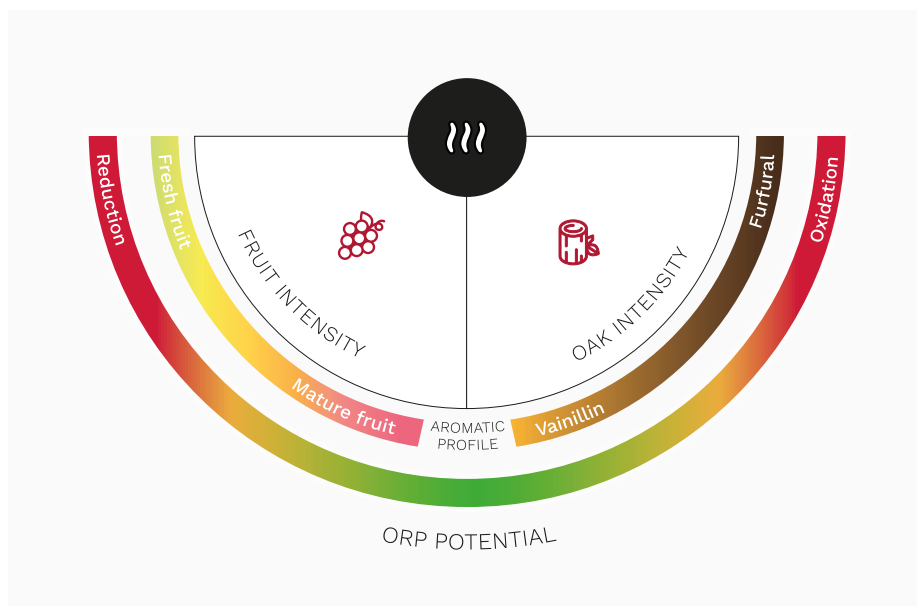
Reduction process

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Aromatic Intensity

We are referring to the amount of aroma that we are capable of perceiving, independent from its quality.

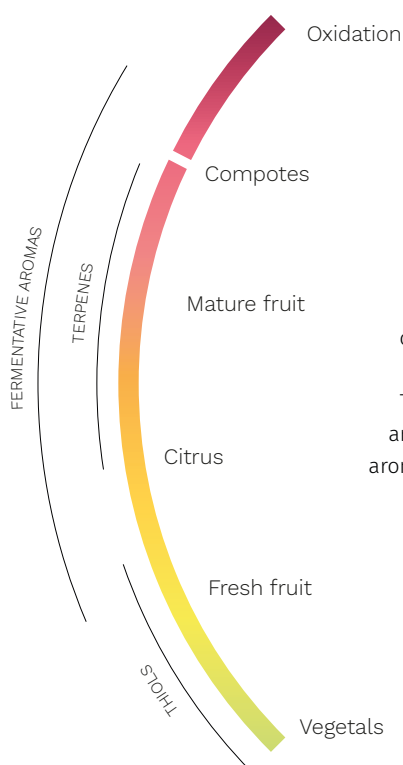
For this purpose, high or low intensity is not necessarily synonymous with quality. The intensity must come with a complex set of nuances that transmit this sensation of quality.



Aromatic profile

The aromas of wine, regardless of their primary, secondary or tertiary origin, can be classified into two large groups: fruit and wood.

Depending on the wine profile that we need to create, we can increase the presence of more or less ripe fruit or aromas of wood with variable toasting.



Fruit profile

Fruit aromas, regardless of their descriptor, can be classified by their ripeness.

This goes from the freshest aromas up to the ripest fruit aromas, and even evolved and oxidised aromas.

Oak profile

Oak aromas can be classified according to their degree of toasting.

At one end, we have aromas from light toasted oak, such as vanilla, and at the other end, smoky aromas from a more intense toasting.



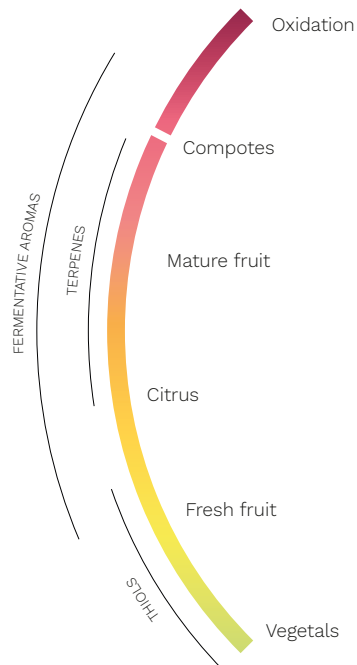
● Fruit profile

Wine aromas are not a static component. Fresh fruit gives way over time to more mature profiles until reaching more evolved aromas. Intensity also reduces during conservation.

Reinforcing the aromatic intensity allows us to not only create more intense wines, but we can also modify the fruit profile towards fresher or riper fruits based on the needs of the market.

When defining aromatic refining products, we need to know what type of fruit they are going to provide, in what direction the profile is going to be modified and what the resulting wine's aromatic intensity will be like.

By defining the intensity and the aromatic profile, we can represent the organoleptic contribution in our sensation map.



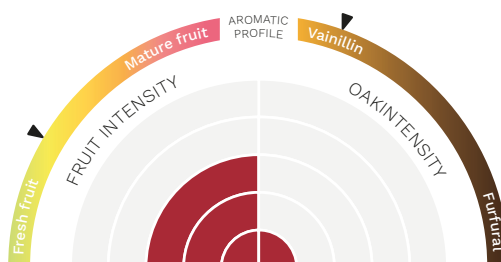
Fresh fruit

Robletan **SOFT TOUCH** **WHITE**

Dose: 1-10 g/hl | Package: 1 kg

Increase in tropical fruit aromas.

- Provides unctuous character and volume to the mouth, improving the wine's acid and tannin balance.
- Light roasted **oak tannin**.



DESCRIPTORS

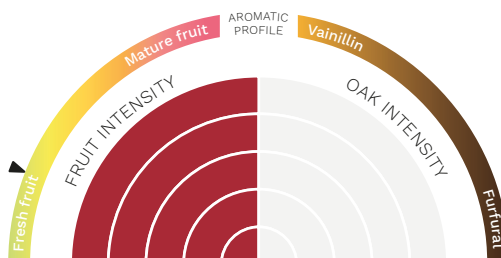


Tanicol **BLANC** **EXCELLENCE**

Dose: 1-15 g/hl | Package: 1 kg

Intensifies the nuances of citrus, fresh grass and thiol notes.

- Restores the youth of white, red and rosé wines, providing greater freshness and aromatic intensity.
- Combination of **tannin from seeds and hydrolysable tannins (citric)**.



DESCRIPTORS



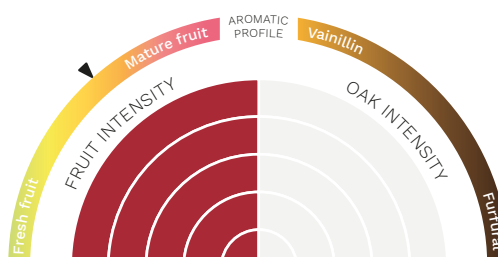
Ripe fruit

Tanicol RED VINTAGE

Dose: 2-40 g/hl | Package: 1 kg

Intensifies the wine's fruit potential.

- Applied during aging or pre-bottling, it enhances the descriptors of red and black fruit.
- In white wines, it creates a more ripe fruit profile.
- Combination of **tannin from seeds and hydrolysable tannin (red fruit)**.



DESCRIPTORS

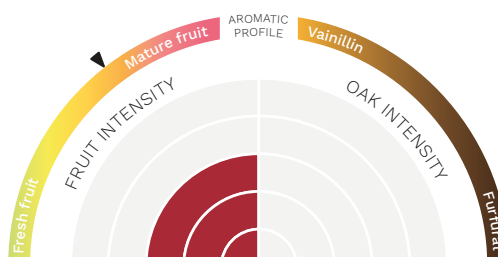


TAN SUTIL

Dose: 2-30 g/hl | Package: 500 g

Accentuates the fruit, extolling the varietal character in wines aged in oak.

- Provides tannic structure, without bitterness or astringency.
- Due to its composition, **100% skin tannin**, it is perfectly integrated into the wine matrix.



DESCRIPTORS



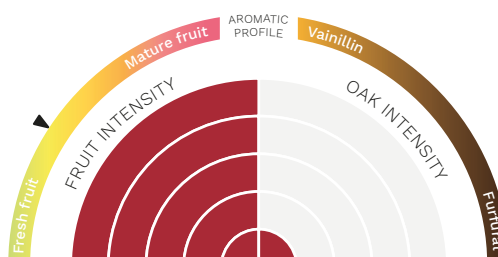
Fruit contribution from oak

SPIRIT Smoothie

Dose: 0,25-3 g/l | Package: 10 kg

More noticeable fruit profile.

- Enhances fruit in all aspects, whether fresh fruit or ripe fruit.
- **Oak alternative** in topping format.



DESCRIPTORS



● Oak profile

Once the aromas and structure we need in an aged wine have been obtained, the **tannins and oak derivatives** can help achieve the necessary touches in order to adjust the profile, enhancing the descriptors and modifying the small nuances in order to produce the desired wine.

Not all wines will evolve in the same way after treatment with oak derivatives. It is essential to know what we are starting with and where we want to get to.

Defined oak profile

Spirit Topping is an **innovative oak alternative format** from Agrovin that makes it possible to define the wine profile in less than 3 weeks, **integrating the wood into the wine immediately** and respecting the fruit intensity.

 **Toppings**



Precision, velocity and integration

 **Candy**

Dose: 0,25-3 g/l | **Package:** 10 kg

Defined vanilla profile and exceptional sweetness.

— Topping created to intensify the sweetest notes in the wine.

 **Smoothie**

Dose: 0,25-3 g/l | **Package:** 10 kg

Spicy profile with a high level of unctuousity.

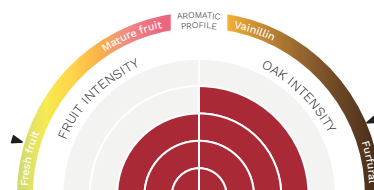
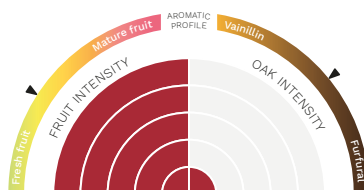
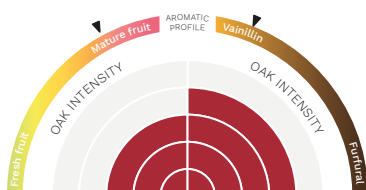
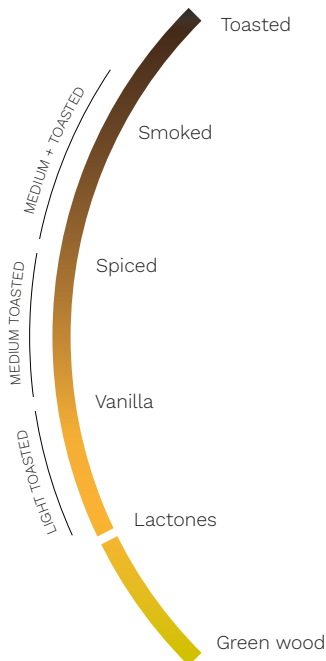
— Topping with a complex spicy profile that actively participates in the wine's mouth.

 **Nuance**

Dose: 0,25-3 g/l | **Package:** 10 kg

Opens up the wine to toasted notes and protects the fresh fruit profile.

— Topping with nuances to increase complexity with a wide range of spiced and roasted aromas.



Adjust the oak profile

Oak tannins make it possible to adjust the wine's aromatic profile immediately, without adding any astringency. At Agrovin, we have selected a range of tannins notable for their defined profile and their rapid integration in the mouth.

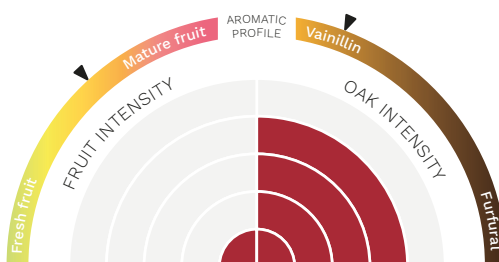
● Light toasted profile

Robletan **OAKBLEND**

Dose: 1-20 g/hl | Package: 500 g

Increases the aromatic complexity by transferring sweet vanilla notes.

- Good integration in the mouth.
- Light toasted **oak tannin**.



DESCRIPTORS



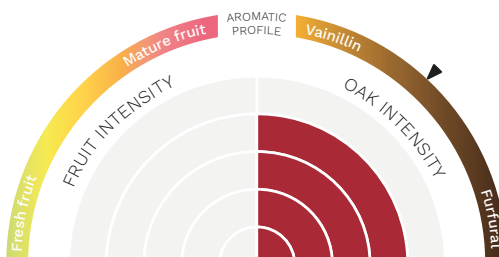
● Medium toasted profile

Robletan **COEUR**

Dose: 1-20 g/hl | Package: 500 g

Increase in sweet aromas.

- High complexity with sweet notes (caramel, dulce de leche).
- Increase in structure.
- Medium toasted **oak tannin**.



DESCRIPTORS



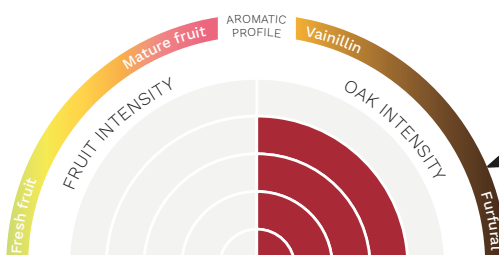
● Medium + toasted profile

Robletan **ICÔNE**

Dose: 1-20 g/hl | Package: 500 g

Depth and toasted notes.

- With a high aromatic intensity, it provides different high-complexity toasted notes.
- Excellent integration in the mouth.
- Medium + toasted **oak tannin**.



DESCRIPTORS

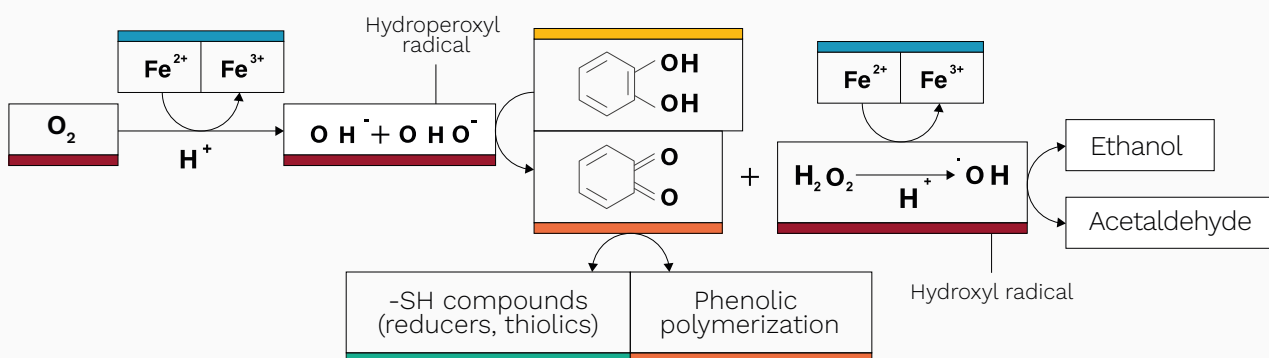


● Oxidation process

Wine oxidation processes are complex and depend on a large number of factors, but can be summarised as follows: there are compounds in wine that act as oxidation substrates, others as oxidants, and lastly, a series of conditions or compounds that will regulate the rate at which these reactions occur. High redox potential values indicate that a large number of compounds are in the oxidised state. Chain reactions occur within this process that cause the oxidation of more compounds, without the need for oxygen to be present.

Oxygen by itself is not capable of oxidising the majority of the wine compounds. To be able to oxidise these compounds, a catalyst is needed for the electron exchange. The main catalysts are Fe and Cu, which are capable of donating electrons to molecular oxygen, creating highly oxidising radicals. Once these radicals are formed, oxidation chain reactions begin.

Knowing the different phases of the oxidation reactions will allow us to select different treatments to neutralise the effects of this oxidation chain



Chemical oxidation process. Fenton's reaction

Phase 1: Fe^{2+} together with a proton (H^+) react to provide the hydroperoxyl radical.

Phase 2: These radicals oxidise polyphenols to their corresponding quinone.

Phase 3: The quinone polymerises with other quinones and browning occurs and in parallel, they react with the -SH groups of the thiols, reducing the wines' aromatic intensity.

Phase 4: On the other hand, the hydrogen peroxide formed during the oxidation of quinone, again using Fe^{2+} as the catalyst, generates the hydroxyl radical, a strong non-selective oxidant, which can oxidise alcohol to acetaldehyde.

Agents	How to neutralise them	Treatments/Solutions
Oxidants	Antioxidants	SuperBouquet Evolution · Microstab Protect
Catalysts	Elimination of metals	Proveget Quit (Check our website)
Oxidation substrate	Clarifying agents	Proveget Premium
Oxidised compounds	Clarifying agents and GSH	Proveget Premium · SuperBouquet Evolution
Aromatic degradation	GSH	SuperBouquet Evolution · Microstab Protect

Reduction of oxidants and aromatic protection

SuperBouquet EVOLUTION

Dose: 10-40 g/hl | Package: 1 and 10 kg

Antioxidant effect for aromatic protection and delayed evolution in wines.

A second generation of **inactive yeasts** specially enriched naturally in **glutathione**.

Its use is highly recommended in the production of white wines from varieties that are highly oxidative or rich in volatile thiols (Chardonnay, Sauvignon Blanc, Verdejo).

Its high antioxidant capacity makes it possible to reduce SO₂ levels during processing. Especially recommended for the development of wines without sulphites.

For the production of wines with low levels of SO₂ or without sulphites, it is recommended to control dissolved oxygen and redox potential and perform regular microbiological controls.

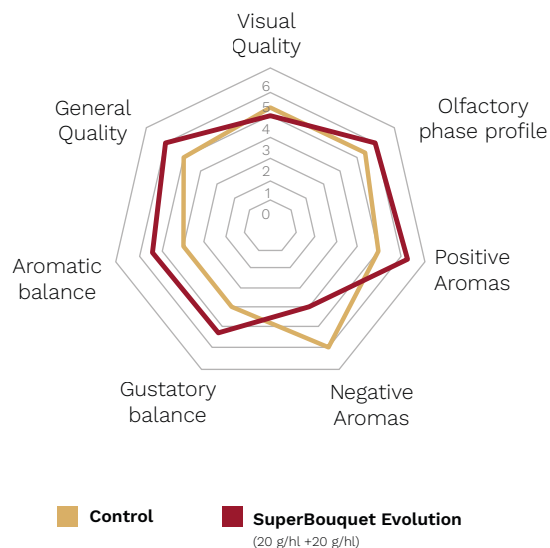
When microorganisms development, it may be necessary to use products with chitosan, such as **Microstab Protect** (more information on page 37).

Organoleptic qualities

Its natural antioxidant effect permits:

- **Protection of aroma:** Helps preserve the aromatic fraction of musts and wines. Its early use guarantees protection from the volatile thiols formed during alcoholic fermentation, which are especially susceptible to oxidation.
- **Protection of color:** Limits the browning of musts and wines. Eliminates reactive quinones from the must.

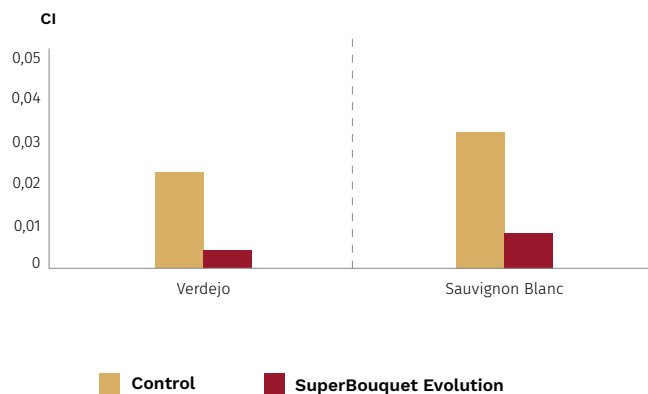
SuperBouquet EVOLUTION is the result of the VINNOSO 2 Research Project: "Development of an oenological itinerary for producing high-quality sulphur-free wines" (INNPACTO IPT 2012-0967-060000).



(60,000 l tanks) Organoleptic profile of 2017 vintage white wine, with and without application of SuperBouquet EVOLUTION, after six months of alcoholic fermentation, without correcting SO₂ levels.

Reducing sulphur content

In a study carried out by our technical department, there was an increase in colour intensity measured after the addition of SuperBouquet® EVOLUTION in wines with no added sulphur.



● Reduction process

Volatile sulphur compounds constitute one of the most obvious olfactory fractions of wine for both the winemaker and the consumer. From the oenological point of view, those with a positive sensory contribution that are part of the varietal identity of the wine are differentiated from those with a negative sensory nature, with the

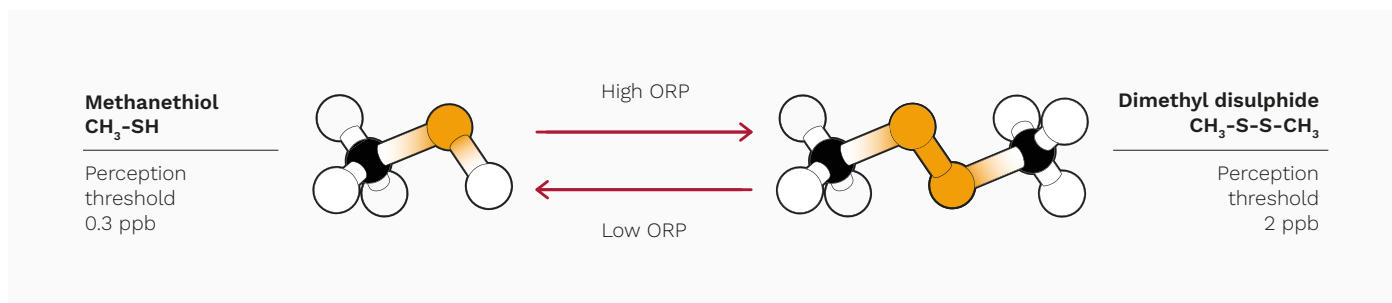
feared reduction characters, which constitute the most common problem both in vinification and in bottled wine, hiding the wines' fruit and varietal characteristics.

Different compounds, different treatment

The **RedOx potential** plays an important role in the perception of reduced aromas. Depending on this potential, different forms of sulphur present in the wine will be oxidised or reduced to create more or less odorous forms.

At low oxidation-reduction potentials, the reduction of sulphur to hydrogen sulphide is favoured and this in turn can be reduced to mercaptans, with much lower perception thresholds.

On the other hand, at higher potentials, hydrogen sulphide and mercaptans tend to oxidise less perceptible forms. These oxidation-reduction reactions are reversible, so we have to take certain precautions when it comes to preventing or treating these aromas.



The aeration of the wine can partially eliminate the H_2S produced, reducing the perception of reduction odours. However, this practice could only be temporary. The oxidation of mercaptans to disulphides involves the conversion of compounds with a low perception threshold (Methanethiol – 0.3 ppb) to others with a higher perception threshold (Dimethyl disulphide – 2 ppb) and is therefore less perceptible when dealing with the highest oxidation-reduction state.

However, the subsequent drop in the wines' electrochemical potential during their time in an inert tank or during reductive aging in the bottle will lead to the conversion of disulphides into volatile sulphur compounds, easily perceptible at low concentrations, so that the reduction notes will be perceptible again.

Treatments to prevent the formation of sulphur compounds will be the most efficient, focusing on proper fermentation management based on nutrition, the use of non-hydrogen-sulphide-generating yeasts and the management of the electrochemical potential.

In the cases of reduction notes in the wine, the curative work will be carried out with Cu^{+2} compounds that react with the -SH groups of the mercaptans and hydrogen sulphide, with the complexes based on copper citrate being most effective due to the need to lower working doses, resulting in a lower presence of residual Cu after treatment.

Because the Cu does not react with disulphides because there are no free -SH groups, the treatment is recommended in low-redox situations to ensure that free and reduced forms prevail (absence of racking or aeration, prior application of ascorbic acid, SO_2 or inactive yeasts with a high content of glutathione) and the treatment has better results.

Polysaccharides against reduction

MannoCUP*

Dose: 1-15 g/hl | Package: 500 g

*The use of this product is not legal for commercial US wineries.

Elimination of undesirable sulphur compounds with minimal impact on the aromatic fraction of the wine.

— Applicable at any time during the production process, the **combination of yeast hull and copper citrate** makes it possible to reduce residual copper levels. Provides structure and body.

Oak against reduction

Compounds derived from the light toasting of oak (tannins or alternatives) permit an increase in redox potential, reducing the impact of sulphur aromas and allowing the wine to express its fruit potential.



Recommended products

SPIRIT Candy

→ Page 14

Robletan OAKBLEND

→ Page 15

Redox potential monitoring and management

ELECTROWINE DosiOx

The ElectroWine DosiOx system monitors the Redox potential to detect the wine's tendency towards reduction or oxidation, and its precise dosage of oxygen allows the potential to be maintained at the desired values.



01

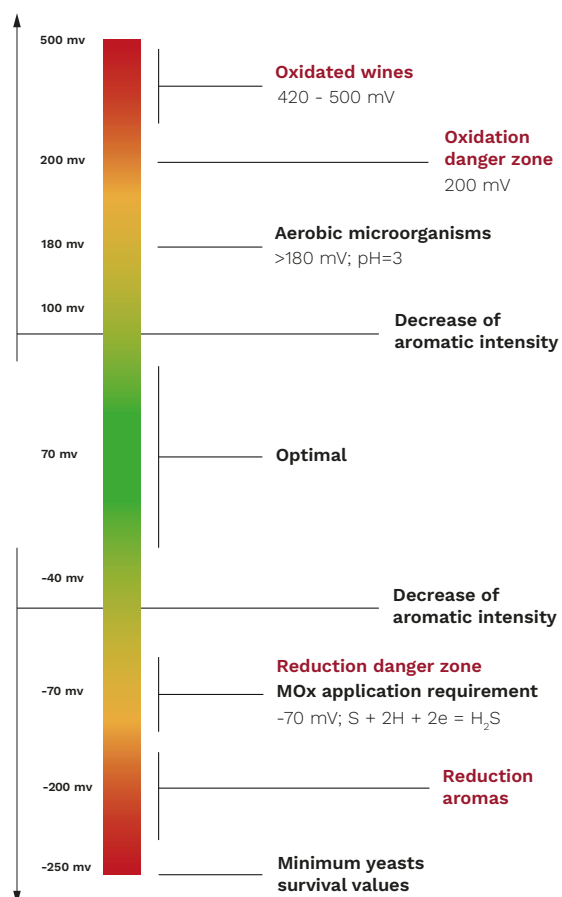
Monitor the development of yeast populations during alcoholic fermentation, allowing nutrition to be more adjusted to the needs of yeasts at each stage.

02

Optimises management of the SO₂ making it possible to know whether the wine is at risk of oxidation or reduction.

03

Microoxygenation management based on quantifiable parameters, which provides greater **process control**.



02. Tactile sensations

The mouth does not only allow for sensations to take place on the tongue and tastebuds, but it also carries olfactory sensations through the aftertaste.

These sensations in the mouth can be perceived gradually as tasting progresses. This allows us to define 3 phases which correspond to the evolution of tactile sensations.

- **Attack:** the first impact, where the sweetness that we perceive when the wine enters the mouth, can be tasted. Firstly, it is perceived on the tip of the tongue, where the sugars and alcohols dominate. However, some olfactory molecules which increase this sweet sensation, can also be perceived.
- **Midpalate:** this is the most complex part, it is here that the character of the wine, with all of its qualities and defects, is determined. We perceive the unctuousity and depth, which create a balance between smoothness and tannicity.
- **Finish:** this refers to how long the wine remains in the mouth. Excessive astringency and bitterness can spoil the tasting in this phase.

Attack

— Sweetness

Gomasol Seda
Spirit Candy

P. 23

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Midpalate

— Unctuousity

Spirit Smoothie
Mannoplus ND

P. 24

P. 25

— Depth

TanReactive
Tanicol Red Vintage
FiniTan

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Finish

— Length

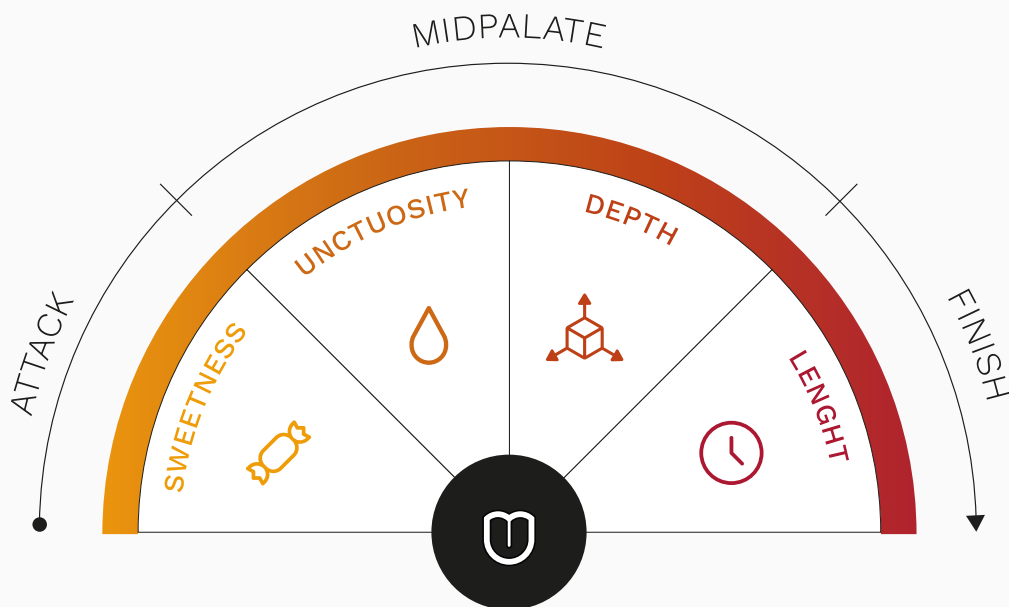
Tanicol Blanc Excellence
Tanicol Red Vintage
Spirit Nuance
Robletan Oakblend

P. 29

P. 29

P. 29

P. 29



1

Sweetness

This is the first sensation we perceive and it is not very persistent.

3

Depth

The tannic structure, acidity and aromatic fraction all come together to contribute this sensation of fullness.

2

Unctuousity

We perceive this in the centre of the mouth, it comprises mainly of polysaccharides which increase the creaminess.

4

Length

The aromatic intensity and complexity contribute to the length in which the wine remains in the mouth.

What influences the balance in the mouth?

Alcohol

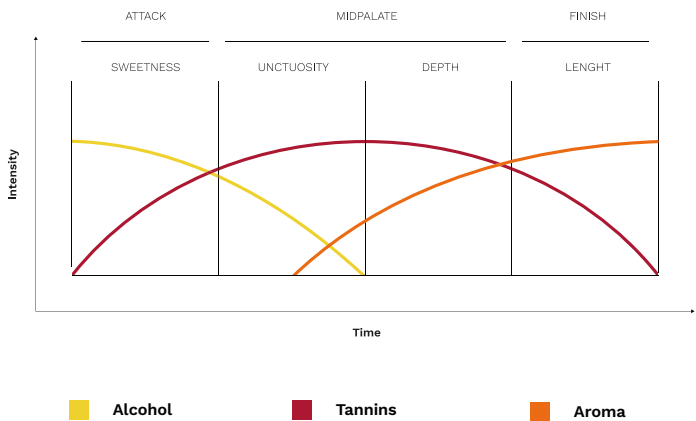
Alcohol contributes sweetness to the attack, but in unbalanced wines, it produces an acidic quality which can be present at any time during the tasting.

Tannins

These are perceived mainly in the midpalate and although they provide unctuousity and depth, they can also contribute, to a lesser extent, to the sweetness and have a negative effect, by contributing astringency and bitterness, leaving sensations of dryness in the final phase.

Aroma

The impact of the aroma in the mouth directly affects the length of the wine staying in the mouth, but it also contributes immensely to the depth. Despite not playing a direct role in the sweetness of the wine, certain “sweet” aromas can increase the sensation of sweetness in the mouth.



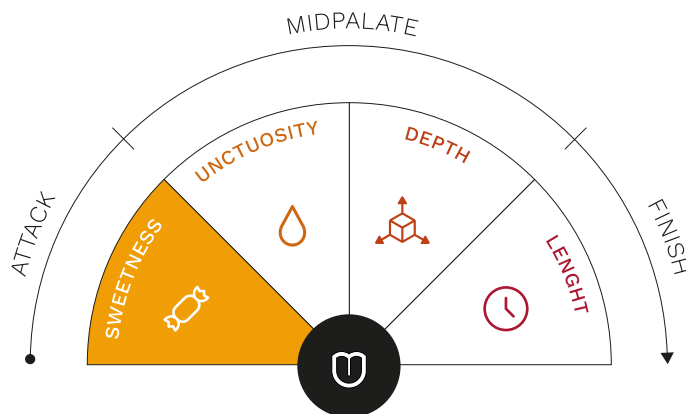
Sweetness

The origin of sweetness in wines not only lies in the residual sugar, there also exist a number of molecules which contribute sweetness or reinforce sweet sensations.

Within the range of different sugars, glucose and fructose, as residual sugars, play an important role, but are not the only ones to do so.

The alcohols present in wine also contribute to the sweet sensation, with ethyl alcohol and glycerol being the only ones that can exceed the perception threshold in wine.

Sweet aromas such as ripe fruit or wood derivatives, such as vanilla and coconut, while not contributing directly to the sweetness, do accentuate its perception.



Balance. Controlling the attack

In wine, the presence of sweetness reduces the perception of bitterness and astringency, while also balancing the perception of acid.

In exchange, excess sweetness can enhance bitter flavours and can be considered stark due to the lack of acidity.

Gum arabic



Gomasol Seda

Toppings



Spirit Candy

- Contribution of sweetness
- Contribution of complexity

Gum arabic will have a direct influence on sweet sensations, however oak derivatives bring added sweetness and increase the overall complexity of the wine at the same time.

Arabic gum and sweetness

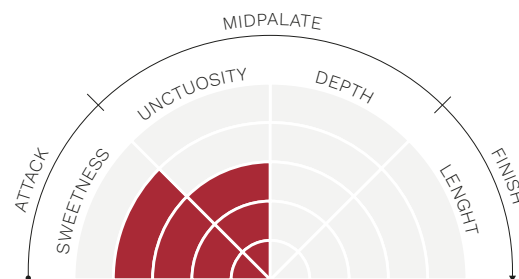
The incorporation of **vegetable-based polysaccharides** increases sweet sensations on the palate, providing balance and roundness in the mouth. At AGROVIN, we use high quality 100% natural raw materials.

Gomasol **SEDA**

Dose: 100-300 ml/hl | **Package:** 10, 21 and 1100 kg

Combination of polysaccharides that increases the sensations of body and sweetness in the mouth.

- It smooths aggressive tannins, reducing excessive astringency from both grapes and wood.
- Maximum respect for the aromatic characteristics of the wine.
- Liquid combination of **gum arabic and mannoprotein**.



Sweetness from oak

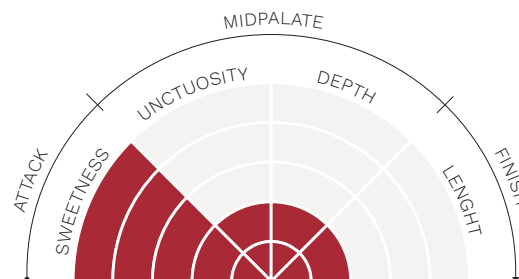
Compounds derived from wood such as, **polysaccharides and triterpenes** can provide sweet sensations. The different aromatic compounds that toasted oak provides wine, such as coconut and vanilla, are aromas that the brain automatically relates to sweet flavours, even though the taste-buds do not detect them in this way.



Dose: 0,25-3 g/hl | **Package:** 10 kg

Topping with defined vanilla profile, intensifies the sweetest notes.

- In wines with a weak attack, provides sweet aromatic notes.
- Quick transfer of lactones and polysaccharides and intense vanilla flavours that participate in the attack in the mouth.
- **Oak alternative** in topping format.



● Unctuousity

The importance of polysaccharides

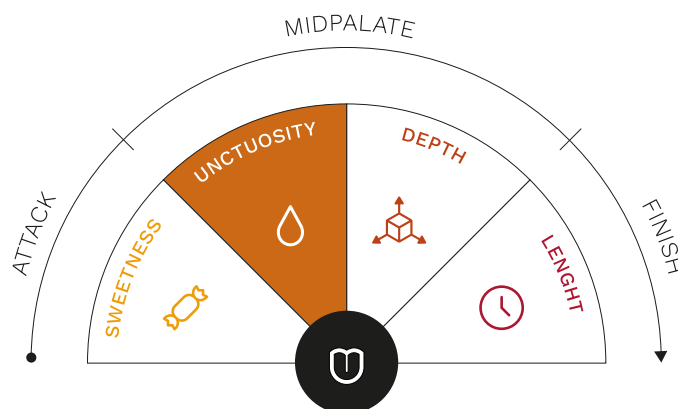
The unctuousity of a wine is the characteristic which causes the wine that we taste to be smooth in the mouth, dense, buttery. This would be the opposite sensation to astringency, reinforcing the moisturising action of saliva.

To achieve balance in this phase, the acidity-structure combination must be in equilibrium with the unctuousity. In other words, as the unctuousity increases, the perception of acidity and structure decreases.

An excess of unctuousity reduces the acidic and tannic sensations, losing part of the freshness and depth, causing the wine to feel flat and to lose its structure.

On the contrary, a lack of unctuousity causes the tannicity and acidity to be perceived with greater intensity, leading to the sensation of an unbalanced wine.

Polysaccharides derived from yeast *Saccharomyces cerevisiae* contribute to an increase in unctuousity. These polysaccharides can be removed from the natural lees of the wine or can even be provided in the form of **inactivated yeast, yeast hulls** or in the form of **purified mannoprotein**.



Although the compounds contributed by wood are different to those contributed by yeast cell walls, the contact with wood in different forms, with medium-light toasting, provides sensory characteristics similar to those from resting on lees.

Unctuousity and oak

The release of polysaccharides from the wood will complement the sensations of unctuousity in wines, allowing the midpalate to intensify in a balanced way.

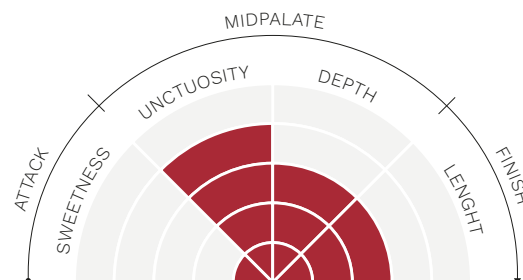


Dose: 0,25-3 g/hl | Package: 10 kg

Increases the unctuousity, completing the sensations in the midpalate and finish.

— Complex spicy profile that actively participates in the wine's mouth.

— **Oak alternative** in topping format.



Unctuousity and mannoproteins

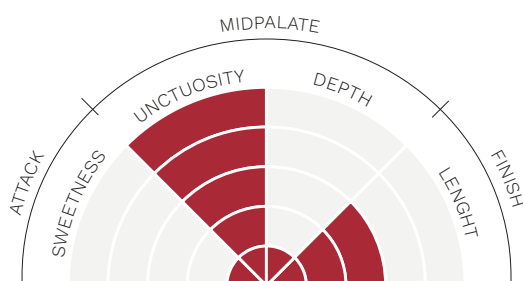
MannoPLUS ND

Dose: 10-75 ml/hl | Package: 1 and 10 kg

All the properties of purified mannoprotein in a liquid format.

MannoPlus ND is a purified mannoprotein in liquid format, prepared for direct application in wine.
Due to its high protein fraction, it provides greater smoothness and reduces astringency while respecting the structure of the wine.

Effect on the mouth



- Its use helps the sensory characteristics of the wine, providing **density, unctuousness and body**.
- It **polishes aggressive tannins**, reducing astringency. It limits the excessive tannins of the wood while respecting the structure of the wine.
- It restores the acid balance by increasing the positive mouth sensations.
- During the second fermentation: it **reduces bitterness** and provides sweet and unctuous sensations. Increases the persistence of foam.

Effect on bottling

Minimal impact on filterability and colour:

- Its low turbidity and colouration make last minute additions possible while fully respecting the **sensory characteristics and filterability** of the wines.

Effect on aroma

Stabilises the aromatic fraction and protects oxidation:

- **Increases the length** of the wine.
- Intensifies fruit nuances in wines with wood.
- Contributes to the fixation of some thiols with a low perception threshold and a characteristic aroma of passion fruit (A3MH).

Production process



Selection of yeast strain and culture medium for the production of mannoproteins with a high protein fraction.



Combination of enzymatic and thermal extraction methods to promote the release of the mannoprotein fraction selected for its properties.



This combined extraction method makes it possible to obtain a product with minimum colouring intensity, preventing the Maillard reaction, which increases the colour and provides abnormal aromas.



Selection of effective molecular weight by means of ultrafiltration.
Filtration prior to product packaging to reduce its influence on filter clogging.



Consult our Webinar

Benefits of mannoproteins and their positive impact on wine quality.

Scan this QR code to watch the video and find more information on this product.

● Depth

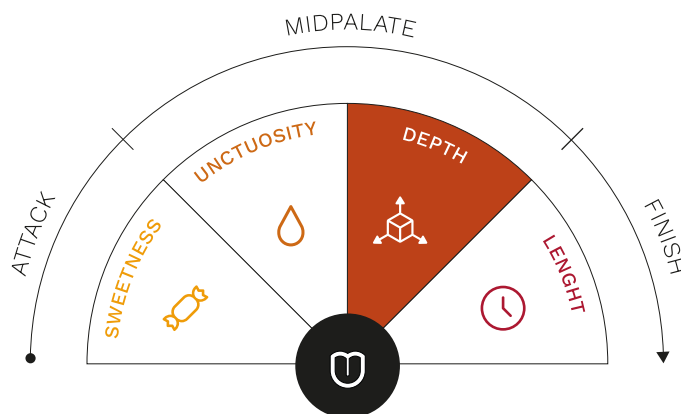
Balance between acidity, tannic structure and aromas

The depth is the capacity of a wine to provide the whole mouth with sensations. The acidity and tannic structure play a part in this. The aromatic complexity and intensity also increase this sensation of depth.

Wines lacking depth are characterised as light wines, with little body and with a lack of balance. An excess of acidity or tannic structure also creates an imbalance in this phase, producing dry and bitter wines.

When the tannic structure increases, we must keep in mind that if tannins with a low degree of polymerisation or ones derived from untoasted wood are used, the depth can be increased, but at the cost of also increasing astringency.

For this reason, we must always consider how the unctuousity plays out, in order to achieve balance.



Depth without astringency. Grape tannins

Grape tannins are ideal in order to increase this attribute, whether the wine requires just a slight increase in depth, or if a greater depth is needed.

This type of tannins integrates perfectly into the wine matrix, increasing the depth with minimal impact on the astringency and aromatic profile.

Seed tannins



TanReactive

Seed tannins/skin and wood tannins



Tanicol Red Vintage - FiniTan

- Contribution of depth
- Aromatic contribution

When we reinforce the structure by providing tannins, we can also increase the aromatic intensity by selecting tannins that provide nuances of fruit or wood.

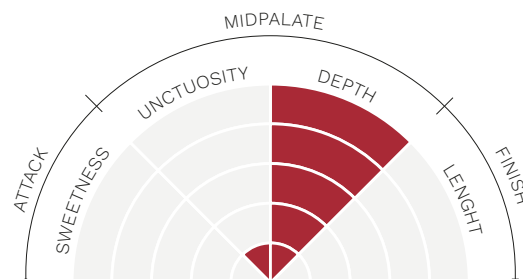
● Depth and structure

TAN REACTIVE

Dose: 10-20 g/hl | Package: 500 g

Great robustness and structure with no increased astringency.

- Favours color stability and better evolution over time thanks to its antioxidant capacity.
- Tannins condensed from grape seeds.



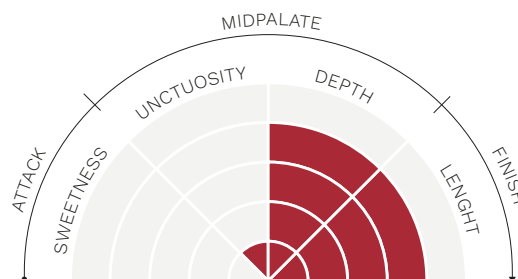
● Depth and fruit

Tanicol RED VINTAGE

Dose: 20-40 g/hl | Package: 1 kg

Highlights red and black fruit descriptors while providing structure and roundness.

- With its increase in aromatic intensity, the length of wine in the mouth is also increased.
- Tannin condensed from grape seeds combined with wood from red fruit trees.



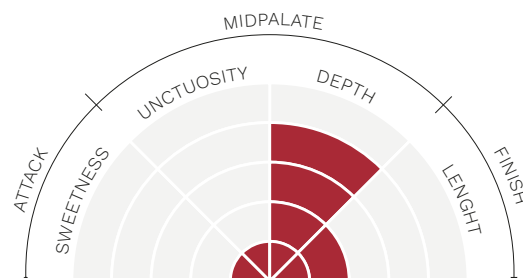
● Depth and oak

FINI TAN

Dose: 5-30 g/hl | Package: 1 kg

It outlines the varietal aromatic characteristics, providing nuances of lightly toasted oak.

- Its antioxidant capacity ensures an excellent evolution in the bottle.
- Condensed skin tannin combined with lightly toasted French oak wood.



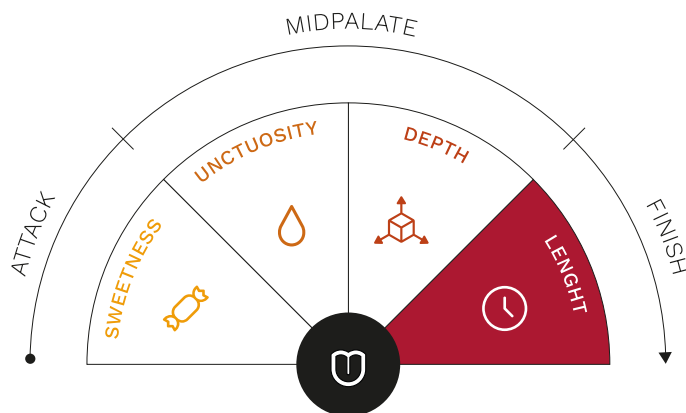
● Length

In a first phase, the aromatic persistence is at a maximum (length). In a second phase, these aromas and other taste sensations decrease until they disappear.

Although the length is made up solely of the aromatic fraction, the taste persistence encompasses all the sensations that remain in the mouth, such as acidity, the warmth of a high alcohol content and the possible presence of bitterness.

The length is a stage within the end of the mouth that is defined as the time in which the aromatic sensations remain in the mouth with a high intensity.

A long wine is one that, with a balanced mouthfeel, is intense and its flavor lasts several seconds after leaving the mouth.



On the other hand, a short wine is one that rapidly disappears after an intense attack.

Aromatic persistence. Length

Taste persistence is more difficult to measure than aromatic persistence, due to its gradual decrease. On the other hand, the drop in aromatic persistence is very notable.

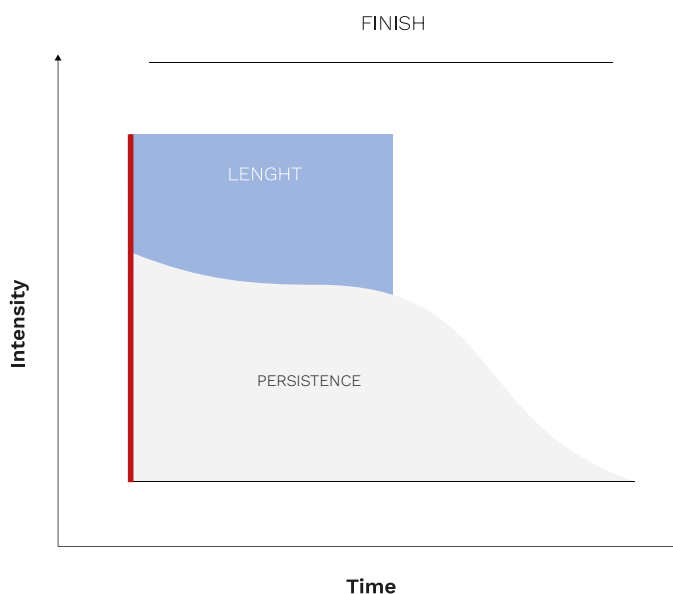
Increasing the time that the aromatic intensity is at a high level directly affects the perceived quality.

This aromatic persistence can be measured in seconds and wines can be classified by the length of time it remains in the mouth.

— The wine leaves the mouth

■ Aromatic persistence (LENGTH)

■ Taste persistence (PERSISTENCE)



Length of the wine

Very short

Short

Medium

Long

Very long

Aromatic intensity duration

< 3 seconds

3 - 4 seconds

5 - 6 seconds

7 - 8 seconds

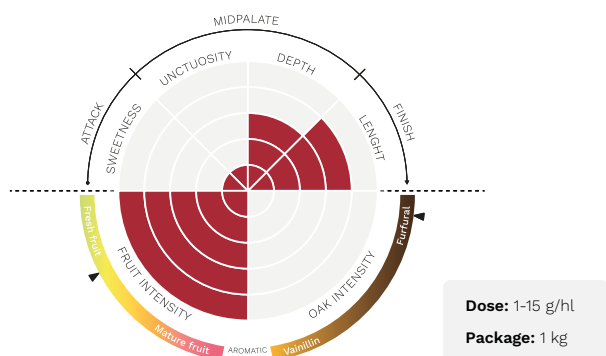
> 8 seconds

● Persistent fruit

Whether in wines with a fruity profile or in wines with a more defined wood profile, in which more focus on the fruit is needed, the use of grape tannins combined with woods from fruit trees increases this persistence of fruity aromas. Fresher or riper notes according to the botanical origin of the wood is also emphasised.

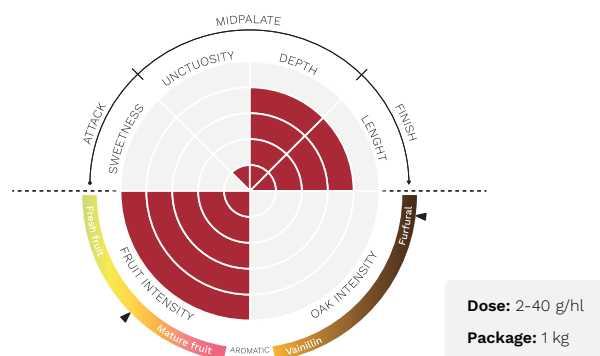
Tanicol **BLANC EXCELLENCE**

Citric-tannin, freshness and intensity.



Tanicol **RED VINTAGE**

Red fruit tannin, intensity and persistence.

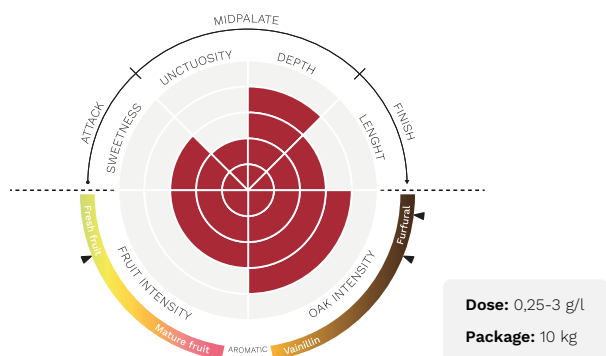


● Persistent oak

To enhance the aromas derived from the wood at the finish, we can opt for more toasted nuances such as coffee and smoked aromas or for sweeter and fresher aromas such as vanilla or spices.

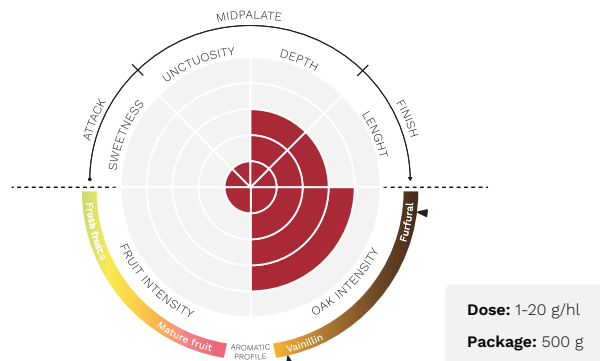
SPIRIT *Nuance*

Topping of persistent toasted aromas.



Robletan **OAKBLEND**

Tannin with persistent aromas of vanilla.



Tanicol and Robletan

Release rate: immediate

Average intensity

Spirit Topping

Release rate: 2-3 weeks

High Intensity

03. Astringent sensations

The tannin structure of a wine plays an important role during all phases, but too much quantity or reactivity can spoil the tasting experience.

This sensation will be more or less intense depending on the tannic composition of the wine and may be accompanied by bitter flavors.

This sensation of dryness and bitterness can occur in all phases of the palate:

- **Attack:** we can find not very ripe tannins that provide greenness.
- **Centre:** in this phase, the tannins predominate more and the drying sensations begin that can predominate until the finish of the wine.
- **Finish:** the bitter flavours are not noticed at first, but they are very persistent, so they can dominate the finish of the wine.

Astringency control

— Vegetable clarifiers

Proveget Premium P. 32

— Increase unctuousity

Superbouquet MN P. 33

Superbouquet P. 33

Mannoplus P. 33

— Reduce reactivity

Gomasol Óptima P. 33

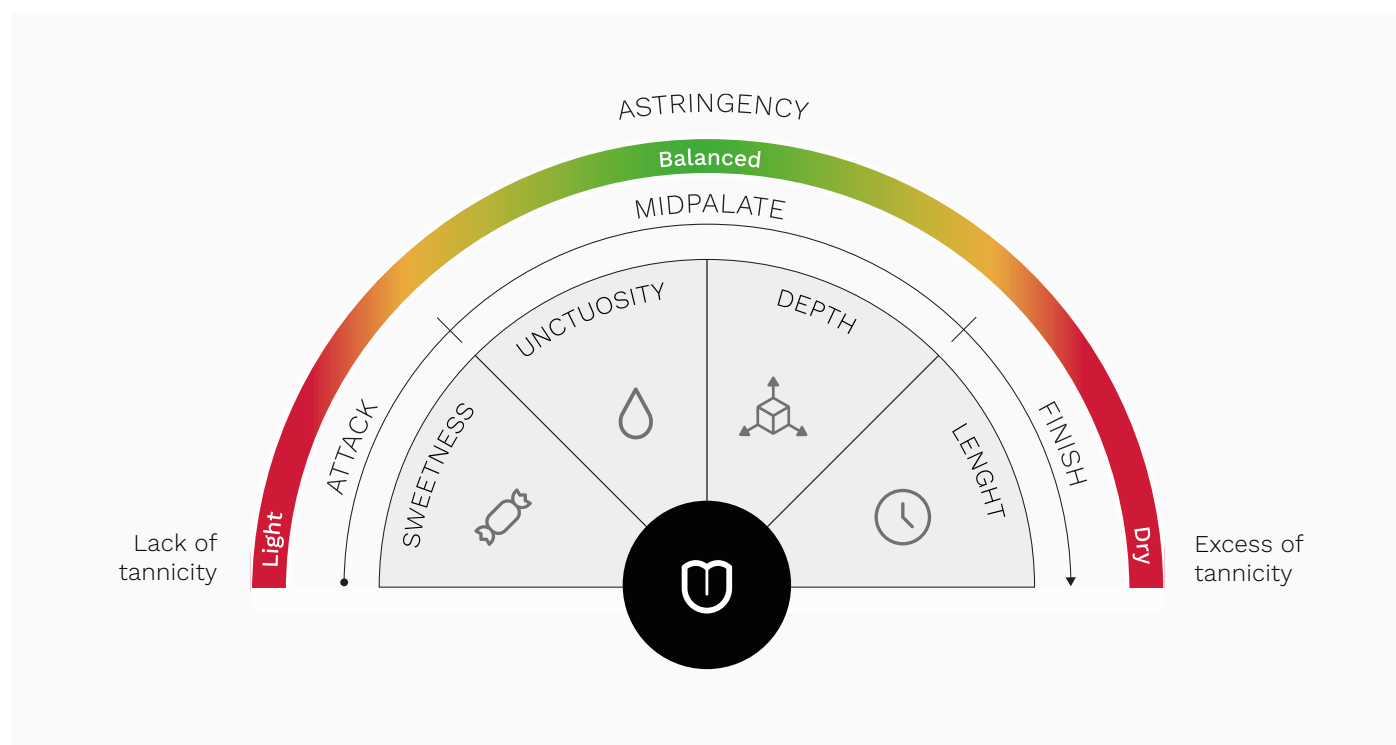
— Reinforces structure

TanReactive P. 33

When the tannicity becomes a defect

Both the grape's own tannins and those provided by wood derivatives can increase this sensation, although their perception is different. Grape tannins cause an astringency more focused on the greens while the tannins provided by the wood tend to provide greater sensations of dryness.

● Tannic structure and balance



The perception of a wine as balanced-structured-drying depends not only on its tannic composition, but also on a series of compounds that can accentuate (acidity) or attenuate this sensation (unctuousness). Therefore, to achieve balance at this stage, we must eliminate or compensate for this astringency, depending on the character of the wine we are trying to make.

Depending on the degree of astringency present in the wine, various treatments can be used:

- **Vegetable fining agents** to **reduce astringency** from moderate to severe, **we can selectively eliminate the** most astringent tannins of lower molecular weight or carry out a more intense reduction, depending on the characteristics of the fining agent.
- To **increase unctuousness** and reduce the perception of astringency, **polysaccharides** increase the sensations of sweetness and unctuousness, which favour lubrication in the mouth, counteracting the drying effect of tannins, while also being capable of joining tannins to form a polysaccharide-tannin complex that attenuates the sensation of astringency.
- Gum arabic **reduces the reactivity of tannins** while providing sweet sensations, reducing the sensation of astringency and the bitterness of highly structured wines.
- **Tannins help strengthen the structure**, both those from grapes and those provided by certain **oak alternatives that** increase amplitude, reducing bitterness and astringency, increasing the tannin structure and reducing the proportion of drying tannins in the wine, completing this phase of the mouth and significantly reducing the feeling of dryness.

● Astringency control

Reduces the polyphenolic load

The specific fining agents precipitate the tannic fraction that is most reactive with proteins, reducing the sensation of astringency. The choice of vegetable fining agents meets the demand of new markets that reject the consumption of animal derivatives, such as vegan or Kosher wines.

The clarifiers of the **Proveget** range are characterised by producing rapid flocculation and producing compact sludge. The use of vegetable proteins aims to reduce astringency while fully respecting the aromatic profile of the wine and reducing the impact of clarification on other parameters such as colour, unctuousness and breadth.

Proveget **PREMIUM**

Dose: 50-150 ml/hl | Package: 20 kg

Liquid vegetable-based clarifier with high reactivity.

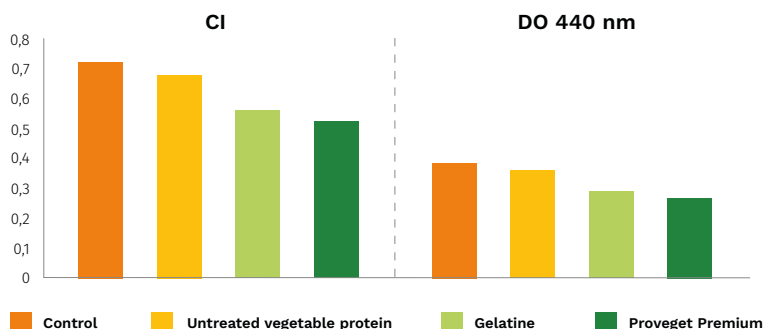
Due to a more environmentally-friendly production process, where there aren't any drastic temperature changes, a removal process occurs where the protein is released from the vegetable structures, which allows a greater active fraction of solubilised vegetable protein to be used. This treatment process allows for a change in the composition of the protein, meaning greater reactivity can be achieved.

- It allows astringent notes and bitterness to be removed and it improves the balance on the palate.
- Rapid sedimentation speed, while respecting the characteristics of the wine as much as possible.

Selective removal of oxidised polyphenols and oxidisable polyphenols

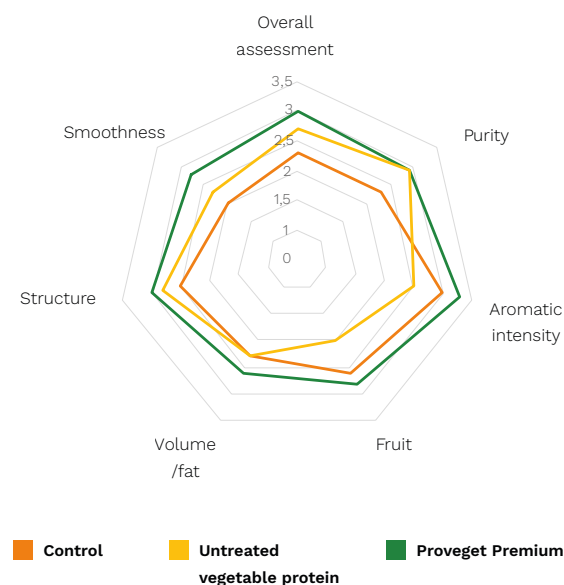
Thanks to its exclusive solubilisation process, this vegetable protein fining agent is capable of preventing and correcting browning while respecting the integrity of the wine.

Effect on the color



Trials on white wine. Grape harvest 2020.

Sensory analysis of red wine



Revelation of fruity notes and improvement in balance while respecting the structure of the wine. **Trial on Tempranillo. Grape harvest 2020.**

Proveget Premium This is the result of the Winebalance project: "Improving the colloidal structure of the wine - New bioactive tools of interest".



Increase unctuousity

The use of yeast polysaccharides causes an increase in the sensation of smoothness or greasiness in the wine. It immediately decreases the perception of astringency. On the other hand, these polysaccharides will combine with more reactive tannins, reducing the sensation of dryness.

Release rate of polysaccharides depending on the type of yeast derivative:



Viable yeast



Inactivated yeast

18-22% polysaccharides.
Contact/release time:
several weeks.



Yeast hull

48-53% polysaccharides.
20-22% soluble
mannoprotein.
Contact/release time:
several days.



Pure mannoprotein

85-95% soluble
mannoprotein.
Contact/release time:
immediate

SuperBouquet

SuperBouquet MN

MannoPLUS

Reducing tannic reactivity

Our **Gomasol** gum arabic does not undergo any chemical or hydrolysis process to modify its appearance, which gives it exceptional stabilizing properties and roundness in the mouth.

Gomasol **ÓPTIMA**

Dose: 70-200 ml/hl | **Package:** 5, 11, 22 and 1100 kg

Reduces astringency while respecting the wine's aromatic characteristics.

- Increases the sensations of the body and the smoothness in the mouth.
- Combination of **gum arabic in liquid format** with low clogging index.

Reinforces structure

TAN REACTIVE

Dose: 5-30 g/hl | **Package:** 1 kg

Reduces astringency by increasing structure.

- It increases the structure of the wine, reducing the proportion of astringent tannins while increasing the sensations of depth and unctuousity.
- 100% grape seed tannin.

04. Microbiological control

Controlling the growth of contaminating microorganisms is an essential process in order to achieve a quality product and comply with strict food safety requirements.

Microbial contamination can negatively affect the quality of wine. We have to keep in mind that grape must is high in sugar and nutrients, which makes it easier for yeasts, bacteria and moulds to grow.

Even after fermentation has taken place, some of these organisms can remain active. However, microbiological analyses and preventative and corrective measures are essential to be able to control them.

Microbiological Control

— Reduction of the microbial load

Microstab ML P. 36

Microstab Protect P. 37

— Reduce phenol perception

Spirit Candy P. 38

Robletan OakBlend P. 38

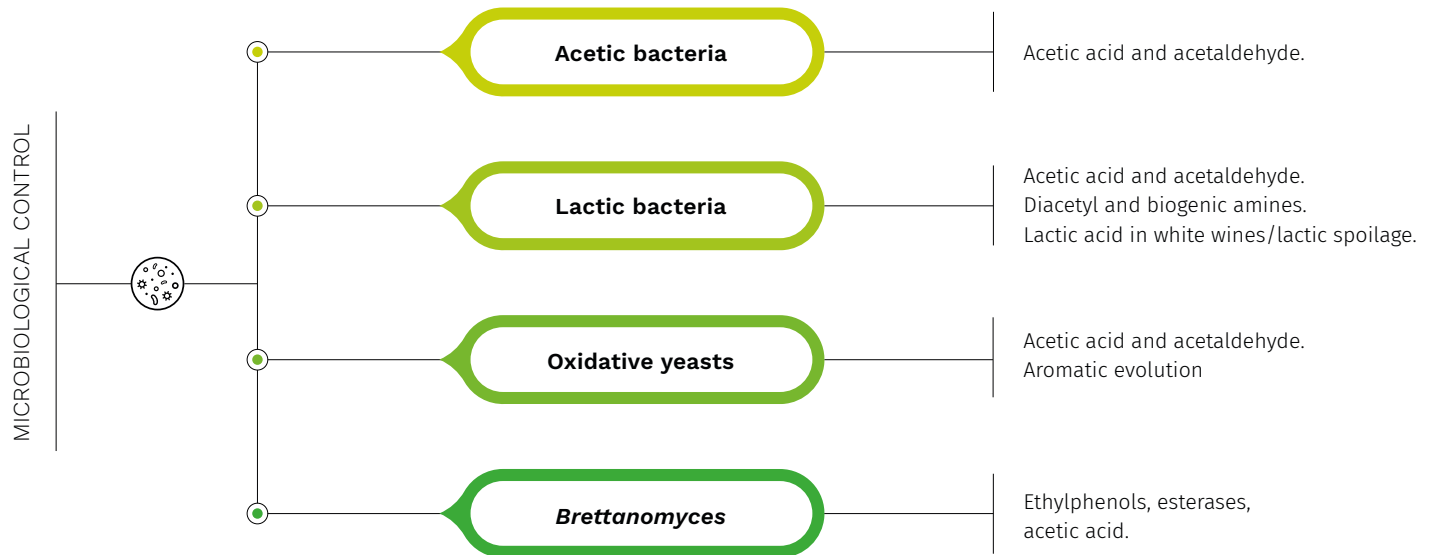
— Recover fruit

Tanicol Blanc Excellence P. 38

Tanicol Red Vintage P. 38

Harmful microorganisms

Microbiological control is an essential safety requisite in the food industry as a whole, and especially in wine. Knowing which microorganisms, and in which specific cases, can cause changes allows us to act before defects appear in the wine, which are especially indicated in wines produced with little to no sulphites.

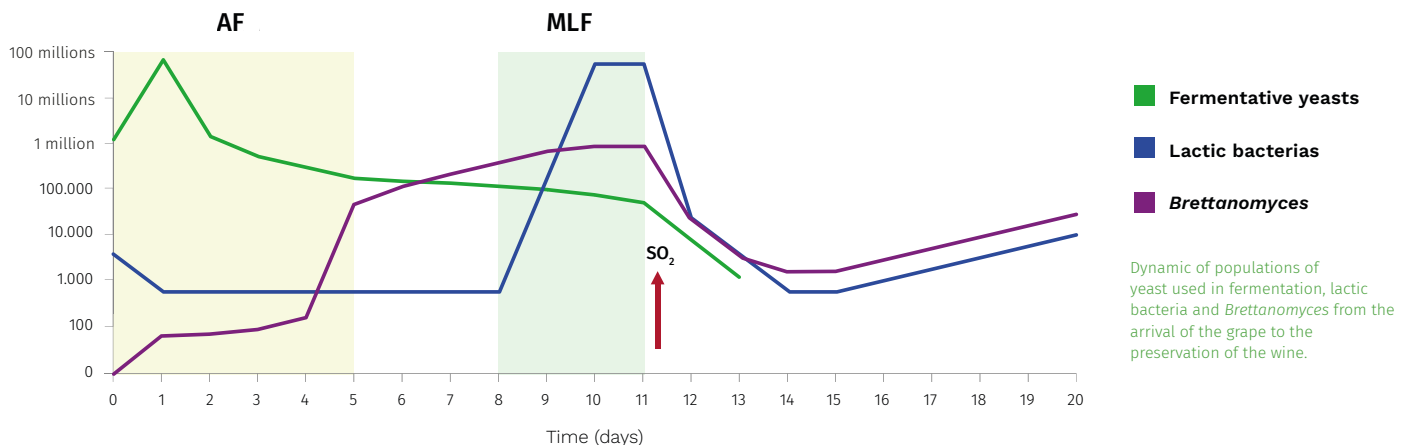


Growth of *Brettanomyces* populations

Yeasts belonging to the genus *Brettanomyces*/*Dekkera* cause one of the most serious problems in modern-day oenology due to the sensory defects directly associated with *Brett*. They appear mainly in quality red wines which have been in contact with wood. *Brettanomyces*, as opposed to the yeasts responsible for the fermentation of the grape must, is characterised by a low fermentation rate and slow growth. However, due to its physiological characteristics, it is capable of growing in adverse conditions.

The first favourable period for the proliferation of *Brettanomyces* is the period in between alcoholic and malolactic fermentation, where the sulphur levels are low and there is no excessive competition between microorganisms.

Once malolactic fermentation is complete and the sulphur levels have been corrected, the growth of this microorganism is more limited. Yet, for long periods of time and in low molecular sulphur levels, these conditions can help its growth reach populations large enough to produce noticeable levels of ethylphenols.



● Microbiology

Reduction of the microbial load

Controlling the growth and development of contaminating microorganisms is essential in producing a quality product that meets food safety requirements. At AGROVIN, we propose the following tools for microbiological control:

MICROSTAB ML

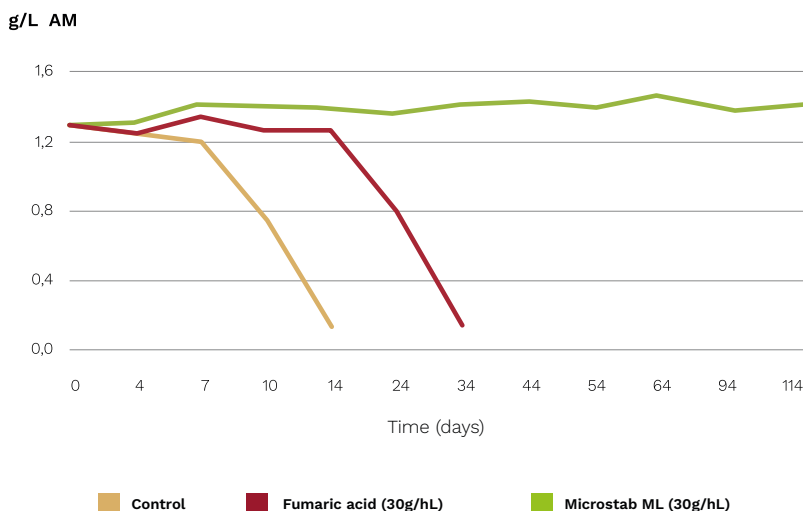
Dose: 30-60 g/hl | Package: 1 and 15 kg

Stabilizer based on fungal chitosan and fumaric acid, effective against lactic acid bacteria.

Formulated with synergistic action between fumaric acid and chitosan of fungal origin. The combination of both compounds allows for greater efficiency in the control of the lactic acid bacteria, reducing populations until eliminated for a prolonged period of time.

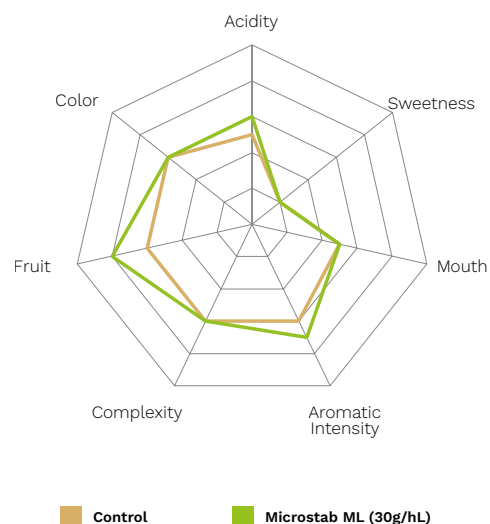
- Potent inhibitor of malolactic fermentation.
- Acts against Brett at a dose of 60 g/hL.
- Acts as a bactericide and bacteriostatic.
- Efficacy even at low doses with no organoleptic affectation.
- Its application can reduce the applied doses of SO₂.
- Efficiency in time.

Evolution of malolactic fermentation



Inhibitory effect of malolactic fermentation in a red wine with an initial inoculum of 10⁶ CFU/ml of lactic acid bacteria, comparing the efficacy over time between the addition of pure Fumaric Acid and the synergistic action of the constituent components of Microstab ML.

Organoleptic profile



Comparison of the organoleptic profile of the control wine with the MLF carried out, and the wine after treatment with 60g/hl of Microstab ML inhibiting the MLF. **Var. Tempranillo 2021**

i Fumaric acid

Organic compound approved for the microbiological control of wines within the EU Regulation 2022/68.

Fumaric acid can control malolactic fermentation even in its initial stages, inhibiting or stopping its evolution at moderate doses (30-60 g/hL).



Dose: 2-20 g/hl | Package: 1 kg

Specific preparation with fungal chitosan, combining antimicrobial, antioxidant and antioxidative properties which allow sulphur levels to decrease during the preservation of wines.

- Substantially reduces or eliminates populations of *Brettanomyces*, decreasing the risk of any changes due to the presence of this contaminating yeast.
- Effectively decreases populations of yeasts and lactic bacteria. As with any other antimicrobial, the reduction in populations depends on the initial microbiological load.
- Antioxidant effect and oxidation protector. Natural antioxidant effect, protecting the aromatic fraction and limiting the browning of wines.
- Inactivates oxidation catalysts. Reduces the activity of oxidative enzymes, responsible for the oxidation of phenols.
- Reduces metallic content (Fe and Cu).



Especially recommended for:

- **Wines containing residual sugar**

Reduces the risk of contamination by lactic bacteria.

- **high pH.**

When sulphur is less effective.

- **Wines free from SO₂.**

Complete alternative to using sulphur.

- **Controlling Brett.**

- **Delaying or controlling MLF.**

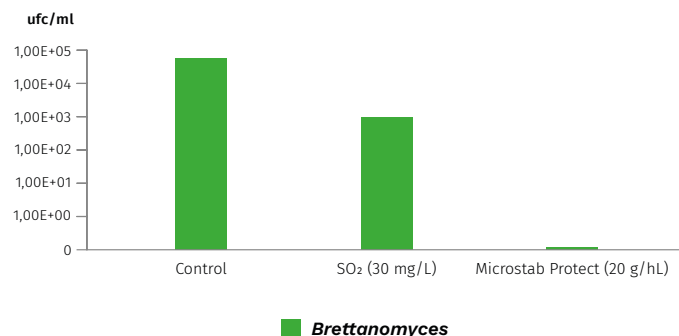
- **Reducing oxidation.**

Antioxidant effect

The reducing power of the inactivated yeast is strengthened by the presence of tannin with antioxidative properties.

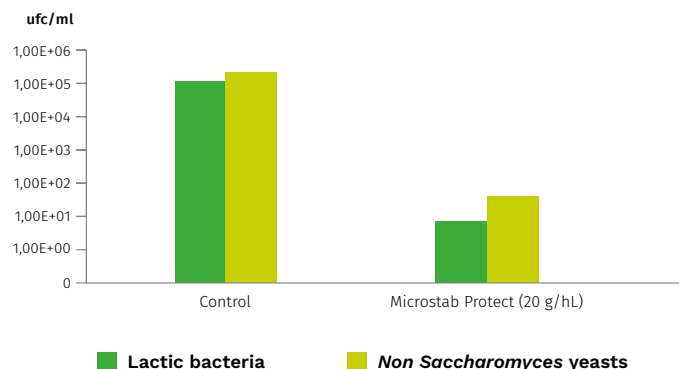
Effect on *Brettanomyces*

Trial on red wine after 10 days of treatment.



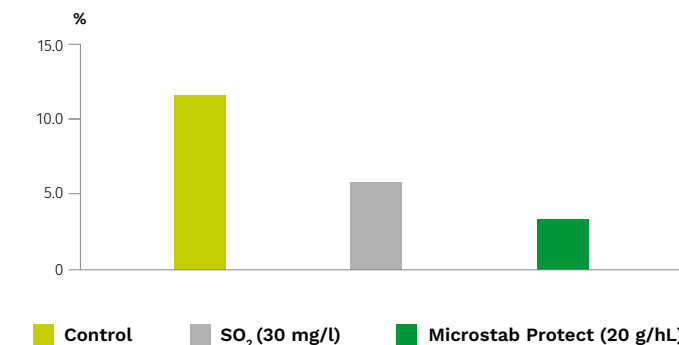
Effect against bacteria and *Non Saccharomyces* yeasts

Trial on white wine without SO₂ (Xarello variety) after 10 days of treatment.



DO Increase 440 nm

Study of browning according to test on accelerated aging (3 days/45°C), equivalent to 6 months of aging in bottle

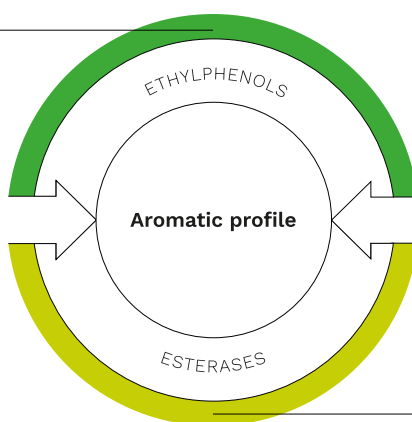


Brettanomyces. Recover aromatic sensations

A contamination of *Brettanomyces* not only modifies the aromatic profile due to the production of ethylphenols, but other compounds, such as acetic acid, fatty acids like isovaleric acid (rancid aromas) or the 2-acetyl-1,4,5,6 -tetrahydropyridine (mousiness) can negatively affect the aroma of the wine.

Apart from producing these compounds with unpleasant aromas, it can be noted that esterases are also produced. These can significantly reduce the perception of the fruit profile. This enzymatic degradation of the fruit profile is one of the first signs of a contamination by *Brettanomyces*.

The **ethylphenols** 4-ethylguaiacol and 4-ethylphenol are the main causes of animal-type aromatic characteristics: stables, horse sweat and hide.



The enzymatic degradation of **fermentative esters** not only decreases the intensity of the fruit, but also increases the perception threshold of ethylphenols.

● Reduce phenol perception

There are certain relationships between molecules that enhance or reduce the perception of some aromatic descriptors. This is the case of the phenolic aroma where the ethylphenols produced by *Brettanomyces* increase its perception and the **vanillin from the wood** significantly reduces its impact.

● Recover the fruit

The **intensely fruity tannins** allow us to recover fresh and fruity aromas in wines that have suffered an enzymatic degradation of the fruit for this reason.



Recommended products

SPIRIT *Candy*

→ P. 14

Robletan **OAKBLEND**

→ P. 15



Recommended products

Tanicol **BLANC EXCELLENCE**

→ P. 12

Tanicol **RED VINTAGE**

→ P. 13

Ordering information

Placing orders

You can place your order by email.

Email to: jason.rodriguez@agrovin.com

Orders are normally shipped within 24-48 hours of receipt.

Terms of sale

Terms for payment are Net 30 days for established accounts. Past due invoices may be subject to a late fee of 2% per month on the unpaid balance.

A Customer Information/Credit Application must be completed and approved by **Agrovin USA inc** in order for credit to be established.

Shipping

Orders are sent via UPS or FedEx.

Large shipments are delivery by common carrier.

Payments

Payment check, money order, Wire transfer.

We accept Mastercard, American Express and Visa.

Prices & Bids

For a price quote on large harvest orders or full trucks like Tartaric, Cream of Tartar... contact by email to jason.rodriguez@agrovin.com
Order early to ensure product availability.

If you require confirmed prices for your order, please contact our sales department by email at: irabada@agrovin.com.

Return Policy

We offer credit if products are returned unopened/undamaged within 10 working days of delivery. Returns are subject to a 15% restocking charge.

Please contact ordersUSA@agrovin.com authorization prior to return.

Winemaking products that require refrigeration or freezing cannot be returned.

Customer will pay return freight costs.

Damage claims

Damage Claims must be reported within 3 working days of delivery.

Supplemental technical information is available online at www.agrovin.com

Return Policy

Dosage rates are infinitely variable: harvest, grape variety, type of wines and specific application, wine temperature etc... It is the buyer's responsibility of the buyer to adapt the use of our products to such variables.

The information in this catalog is provided "as is", without warranty or guarantee of any kind.

It is important to us that the information in this catalog is as accurate as possible. We apologize for any technical inaccuracies or typographical errors.

Calculations and conversions charts

Temperature conversions

F°	0	32	40	50	60	70	80	90
C°	-18	0	4	10	16	21	27	32
$F^{\circ} = (C^{\circ} \times 9/5) + 32$								

Acids

	Tartaric acid	Sulfuric acid	Malic acid	Lactic acid
Tartaric acid	1	0.653	0.893	1,2
Sulfuric acid	1.531	1	1.367	1.837
Malic acid	1.119	0.731	1	1.343
Lactic acid	0.833	0.544	0.744	1

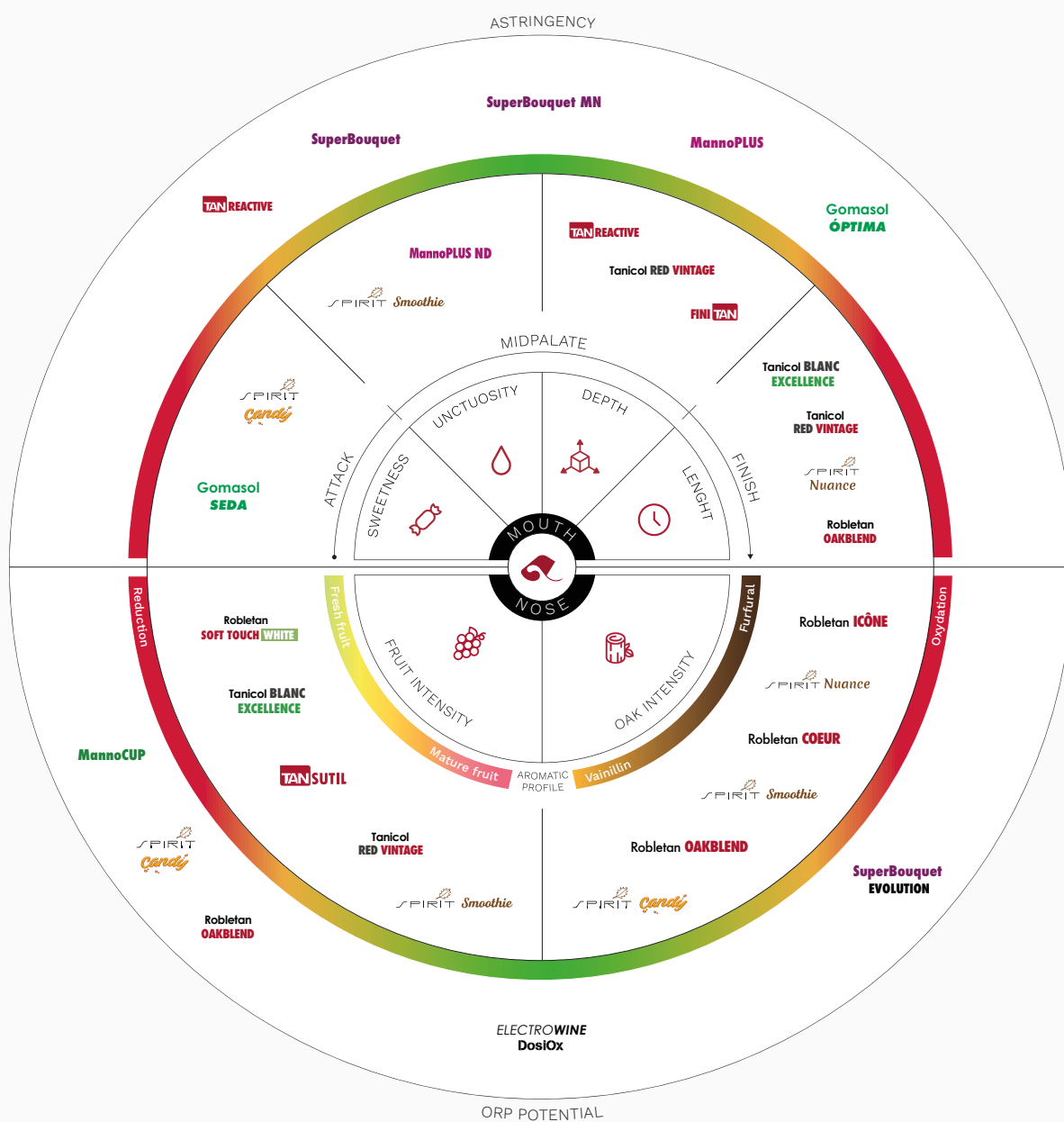
Equivalent Units

1 gal = 3,785 L	1 L = 0,264 gal
1 ml = 0,035 fl oz	1 fl oz = 30 ml
1 gal = 0,379 hl	1 hL = 26,4 gal
1 metric ton = 2205 lb	1 metric to = 1000kg
1 US ton = 2000 lb	1 US ton = 907 kg
1 lbs = 453,6 g	
1ppm = 1 mg/l	
1º Brix = 1% sugar (wt/vol)	
1 Vol % = 1 ml/ 100 ml	
1 barrel = 225 L = 59,4 gal = 25 cases	

Dosage

g/hl	lbs/10³gal	ppm
5	0.4	50
10	0.8	100
15	1.2	150
20	1.6	200
100	8	1000

Product Summary









MICROBIOLOGICAL CONTROL



MICROSTAB ML

MICROSTAB PROTECT



Oak Alternatives. Topping format

Spirit Candy  	Topping with defined vanilla profile, intensifies the sweetest notes.	P. 14
Spirit Nuance  	Amplifies the wine with toasted nuances and protects the fresh fruit.	P. 14
Spirit Smoothie  	Increases the unctuousness, rounding out the sensations in the centre and finish.	P. 14





Clarifying agents

Proveget Premium  	Highly reactive liquid vegetable clarifier.	P. 32
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Microbiological Control

Microstab ML	Stabilizer based on fungal chitosan and fumaric acid, effective against lactic acid bacteria.	P. 36
Microstab Protect  	Specific preparation with fungal chitosan, which combines antimicrobial, antioxidant and antioxidase properties.	P. 37



















Gum arabic

Gomasol Óptima  	Reduces astringency while respecting the wine's aromatic characteristics.	P. 33
Gomasol Seda  	Combination of polysaccharides that increases the sensations of body and sweetness.	P. 23

Polysaccharides and mannoproteins

MannoCup  	Elimination of sulphur compounds with minimal impact on the aroma.	P. 19
MannoPlus ND  	All the properties of purified mannoproteins in a liquid format.	P. 25
MannoPlus  	Purified Mannoprotein. Provides density, unctuousness and body.	P. 33
SuperBouquet  	Inactive yeast that polishes aggressive tannins, reducing astringency and increasing sensations of body and volume in the mouth.	P. 33
SuperBouquet Evolution  	Antioxidant effect to protect aromas and slow down evolution.	P. 17
SuperBouquet MN  	Yeast crusts. Rapid release of polysaccharides and mannoproteins.	P. 33

Tannins

FiniTan  	It outlines the varietal aromatic characteristics, providing nuances of lightly toasted oak.	P. 27
Robletan Coeur  	Increases structure and complexity with sweet notes (caramel, dulce de leche).	P. 15
Robletan Icone  	Elevates aromatic intensity, provides amplitude and highly complex toasted nuances.	P. 15
Robletan Oakblend  	Increases the aromatic complexity by transferring sweet vanilla notes.	P. 15
Robletan Soft Touch White  	Provides unctuousness and volume in the mouth, improving the wine's acid and tannin balance.	P. 12
Tanicol Blanc Excellence  	Intensifies the nuances of citrus, fresh grass and thiol notes.	P. 12
Tanicol Red Vintage  	Intensifies the wine's fruit potential.	P. 13
TanSutil  	Accentuates the fruit, extolling the varietal character in wines aged in wood.	P. 13
TanReactive  	Reduces astringency by increasing structure.	P. 27

Technology

Electrowine DosiOx	System for measuring the ORP potential and oxygen dosage.	P. 19
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Agrovin was founded in 1960 with the aim of supplying products for winemaking. At first, the company operated only in the Castile-La Mancha region from its headquarters in Alcázar de San Juan, a town in the province of Ciudad Real.

In 1965, the company began to expand within Spain and opened local offices throughout other country's top winemaking regions.

In 2005, it made the leap to other foreign markets and built a factory in Romania that is considered to be one of the most modern in Europe. Today, the company operates in more than 15 countries. Beginning in 1985, Agrovin began to diversify into other sectors, such as beer, oils, mineral water, and the agri-food industry.

Agrovin has been expanding and modernizing its facilities. The company currently has more than 1,800 square meters of office space, more than 15,000 square meters of warehouses, and multiple in-house production plants throughout the world. It also has its own logistics network to ensure optimal distribution.

In its commitment to winemaking and to ongoing research advancements, Agrovin has the largest enological laboratory in Spain.

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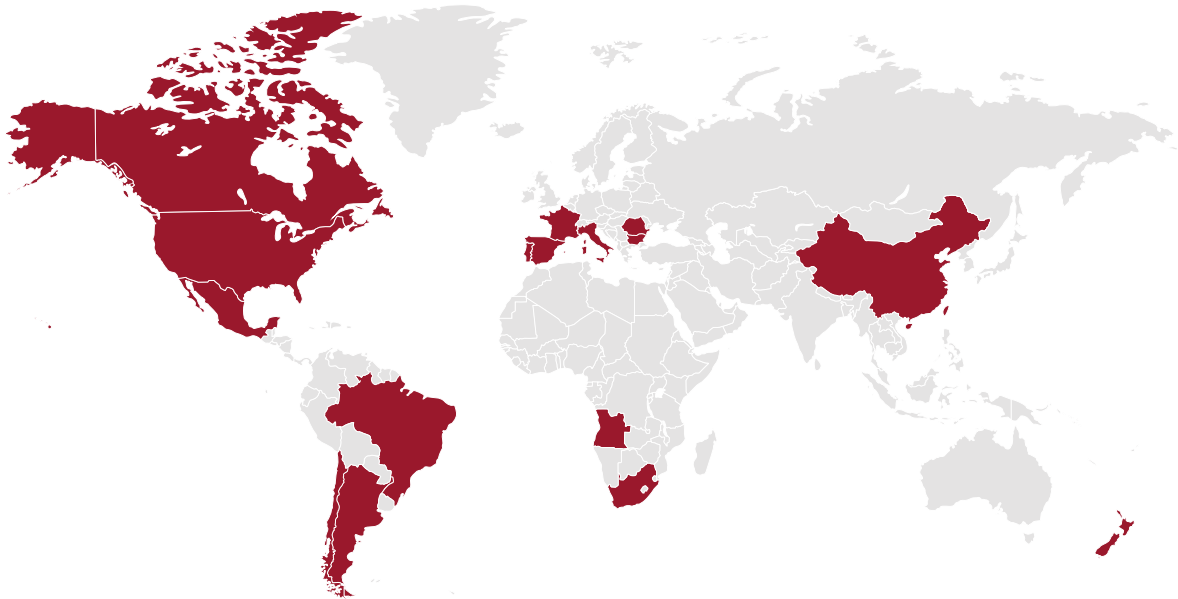
Agrovin is the sector's first company to achieve compliance with quality standards in Spain.

In 2018, the company earned certification recognizing its achievement of the highest food safety standards.

It also has its own ENAC-accredited laboratory.



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