Oenological Products

2018 - 2019

Let us
bring out
your difference

IOC

Révélons votre différence

THE INSTITUT ŒNOLOGIQUE DE CHAMPAGNE

A UNIQUE PARTNER

**You are already unique,
now we'll make you outstanding.**

Our strong presence on the ground in all vineyards in France and throughout the world is the keystone of our expertise in wine profile management.

This expertise is being enhanced day after day, through the ongoing connection between œnologists, laboratories and you, who are part and parcel of our learning community.

By helping you manage time and through rationalisation, we aim to make your work easier. This is why we are constantly seeking formulations that are more effective, more respectful of your wine and easier to use.

Through its experience on the ground and its "Design & Development" laboratory, IOC offers a range of traditional and innovative œnological products for vinification and elevage of still and sparkling wines.

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OPTIMISING THE FERMENTATION

Go to www.ioc.eu.com and discover our dedicated decision-making tool : which proposes and automatically calculates optimised protocols, tailored to your requirements, product-objectives and choice of yeast.

EVALUATING THE ENVIRONMENT

AGGRESIVITY OF THE LIQUOR	
BASIC CONDITIONS	0
Vinification without oxygen	+ 1
Potential alcohol content > 13,5 % vol.	+ 1
Potential alcohol content > 14,5 % vol.	+ 2
Must turbidity < 80 NTU	+ 1
Temperature < 15°C or > 28°C	+ 1
pH < 3,2	+ 1
AF recurrently difficult	2
0 / 1 / 2 / 3 et +	← TOTAL

NITROGEN DEFICIENCIES FOR A YEAST WITH MODERATE REQUIREMENTS(1)				
	POTENTIAL ALCOHOL CONTENT			
Assimilable nitrogen of must	< 12,5 % vol.	from 12,5 to 13,5 % vol.	from 13,5 to 14,5 % vol.	> 14,5 % vol.
> 200 mg/L	No nitrogen deficiency		Low deficiency	Moderate deficiency
from 150 to 200 mg/L	No nitrogen deficiency	Low deficiency	Moderate deficiency	High deficiency
from 120 to 150 mg/L	Low deficiency	Moderate deficiency	High deficiency	Extreme deficiency
from 90 to 120 mg/L	High deficiency	High deficiency	Extreme deficiency	Extreme deficiency
< 90 mg/L	Extreme deficiency	Extreme deficiency	Maximum deficiency	Maximum deficiency

FERMENTATION STRATEGIES TAILORED TO PRODUCT-OBJECTIVES

	FERMENTATION SAFETY	OPTIMISATION AND EVALUATION OF AROMAS
PROTECTION OF YEASTS AND DETOXIFICATION OF MUST	AT 2/3 OF AF **ACTICLEAN** 0 0 0 20 g/hL	
YEAST NUTRITION	AT 1/3 OF AF **Diammonium phosphate** 0 5 15 20 30 30 g/hL +15 per % vol>14 +15 per % vol>13 AT THE BEGINNING OF AF White/rosé musts - **VITISTART** Red musts - **ACTIVIT** 0 10 20 30 30 30 g/hL	AT 1/3 OF AF **ACTIVIT O** OR **ACTIVIT NAT** 0 10 30 20 20 20 g/hL **+ Diammonium phosphate** 0 0 0 15 30 30 g/hL +15 per % vol>13 +15 per % vol>14 AT THE BEGINNING OF AF **ACTIVIT O** 0(2) 10 20 20 20 20 g/hL

(1) For a yeast with low requirements, reduce deficiency by one level ; for a yeast with high requirements, increase by one level.

PROTECTING YEASTS : Survival factors

ACTIPROTECT +

1 kg

PREPARE YEASTS FOR ALCOHOLIC FERMENTATION.

ACTIPROTECT + is a natural product based on inactivated yeasts, extremely rich in sterols that strengthen the yeast's plasma membrane during rehydration.
In this way the yeast is better prepared to deal with the acidity of the must. It is less stressed during inoculation.

Protection : Specific yeast-derived sterols and polyunsaturated fatty acids = strengthening the external membrane and facilitated exchanges (sugars, etc.).

Stimulation : Minerals, vitamins = reactivation of the yeast's internal metabolism.

Impact sur le vin → Secure fermentation, particularly for clarified and/or sugar-rich musts,
→ Shorter lag phase,
→ Promotes the yeast's potential,
→ Reduced production of malodorous compounds and volatile acidity.

A yeast protected from rehydration is an unstressed yeast that will produce fewer compounds that could spoil the wine.

ACTIPROTECT ROSÉ

1 kg

YEAST PROTECTOR TO BRING OUT THE AROMAS OF ROSÉ WINES.

ACTIPROTECT ROSÉ is a 3rd-generation protector: obtained from a yeast strain selected for its exceptional sterol-producing capacity, autolysed using a dedicated process to concentrate these sterols and combined in an inactivated yeast particularly rich in minerals and vitamins.

This unique composition confers a capacity that was unmatched by second- and first-generation protectors to strengthen the membrane of active yeasts when being rehydrated. More resilient and functional, the plasma membrane optimises must-to-cell exchanges, in particular of thiolated aroma precursors.

The result is that the yeast is able to bring out the entire aromatic potential of the rosé must, in complete safety where fermentation is concerned, even in stress conditions (e.g. enhanced clarification, low temperature, vinification in reducing conditions).

MEDIA AND DETOXICANTS

ACTICLEAN

1 kg | 5 kg

DETOXIFYING INACTIVATED YEASTS AND CELLULOSE MEDIUM, TO PREVENT STUCK FERMENTATIONS.

ACTICLEAN prevents or limits sluggish and stuck fermentations. It is used in difficult conditions (high alcohol, low turbidity, extreme temperatures), at two-thirds of the AF, to gradually absorb the toxins released into the liquor by stressed yeasts.

CELLCLEAN

500 g

SPECIFIC YEAST CELL-WALL FRAGMENTS WITH HIGH DETOXIFYING POWER, TO DEAL WITH STUCK FERMENTATIONS.

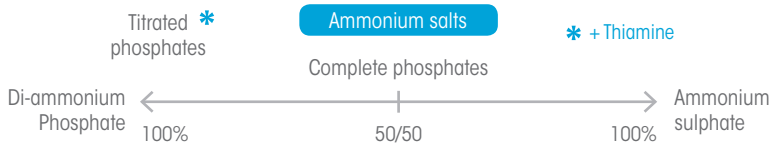
CELLCLEAN removes numerous inhibitory molecules from the AF, which are concentrated in the must when the AF is stuck. It is one of the essential tools for preparing stuck wine before restarting the fermentation.

NUTRITION : GROWTH FACTORS

AMMONIUM SALTS

Ammonium salts are the nitrogen source most rapidly assimilated by yeasts. They are added preferably during the first 1/3 of the alcoholic fermentation and particularly when nitrogen deficiencies are significant, however always avoiding additions during the yeasts' growth phase (start of AF).

Ammonium salts enable the yeast to perform :
→ Biosynthesis of yeast proteins needed for cell multiplication,
→ Biosynthesis of cell wall proteins essential for sugar transport.



EXPERT ADVICE

Ammonium salts are assimilated very rapidly by yeasts, which causes a yeast growth spike. This phenomenon can make wines dry and increase sulphurous flavours. If is often preferable to use complex nutrients.

AMMONIUM SULPHATE

25 kg

FOR SIGNIFICANT NITROGEN DEFICIENCIES.

Adding AMMONIUM SULPHATE provides the must with the nitrogen needed for the yeasts to multiply and to keep them active throughout the fermentation. Should preferably be used during the first third of the AF, as a supplement to a more complex nutrient.

DI-AMMONIUM PHOSPHATE

1 kg | 5 kg | 25 kg

COMPLETE NUTRITION FOR A MAJOR DEFICIENCY.

DI-AMMONIUM PHOSPHATE is an ammoniacal nitrogen supplement for liquors poor in assimilable nitrogen. It is used preferably in the first third of the fermentation, when the yeasts are no longer in the growth phase, in cases where the complex or organic nutrient added is insufficient to mitigate the deficiency level. Recommended ammoniacal nitrogen source to limit the production of SO_2 for certain yeasts.

PHOSPHATES COMPLETS

1 kg | 5 kg

COMBINED AMMONIACAL NITROGEN SOURCE.

Made up of di-ammonium phosphate and ammonium sulphate, complete phosphates provide yeasts additional nitrogenous nutrition. To be used for significant deficiencies in the first third of the alcoholic fermentation, in cases where you want to balance additions between phosphate and sulphate.

PHOSPHATES TITRES

1 kg | 5 kg

TO PROMOTE SIGNIFICANT YEAST BIOMASS.

A mixture based on di-ammonium phosphate and thiamine, titrated phosphates combine a sulphate-free nitrogen source with an essential vitamin for the growth phase. To be used when you want to obtain a high yeast biomass, with a more limited risk of associated sulphurous deviations. The absence of sulphate reduced the possibilities of sulphite production by certain yeasts.
TITRATED PHOSPHATES are particularly suitable for the bubble-forming phase.

THIAMINE

10 g | 1 kg

TO FACILITATE YEAST GROWTH.

THIAMINE (vitamin B1) acts on the growth of yeasts, increasing their population and prolonging their activity. It does this by being involved in carbohydrate metabolism at the point where ketonic acids are decarboxylated to aldehydes.

FOSFOVIT

1 kg | 15 kg

FOSTERING YEAST MULTIPLICATION IN THE VINIFICATION PROCESS.

With a mixture comprising ammonium phosphate as sole nitrogen source, as well as thiamine, FOSFOVIT fosters strong yeast multiplication without the drawbacks associated with the use of ammonium sulphate (a potential source of SO2 unusable in organic vinification).

COMPLEX NUTRIENTS

ACTIVIT

1 kg | 5 kg | 15 kg

A COMPLEX, NITROGEN-RICH NUTRIENT TO MANAGE DEFICIENCIES.

ACTIVIT contains di-ammonium phosphate, inactivated yeast and thiamine. It therefore provides assimilable nitrogen in amine and ammoniacal form, vitamins and minerals, and ensures uniform development of yeasts when there is a pronounced deficiency.

VITISTART

1 kg | 15 kg

COMPLEX NITROGENOUS NUTRIENT AND MEDIUM FOR YEASTS.

A good compromise between a combined nitrogen source and cellulose source, VITISTART is particularly wellsuited to the conditions for white and rosé musts (temperatures and/or low turbidity).

100% ORGANIC NUTRIENTS

ACTIVIT NAT

1 kg | 5 kg

100% ORGANIC SOURCE OF BIOAVAILABLE AMINO ACIDS AND VITAMINS.

ACTIVIT NAT is a recommended nutrient to avoid sulphurous odours, facilitate alcoholic fermentation and bring out varietal thiols.

EXPERT ADVICE

Activit Nat and Activit O very effectively prevent the appearance of reductive notes by avoiding yeast overpopulation phenomena.

ACTIVIT O

1 kg | 5 kg

100% ORGANIC COMPLETE NUTRIENT FOR HIGH QUALITY FERMENTATION.

ACTIVIT O promotes aromatic expression :
→ fermented, by directly supplying amino acids as sources of fruity and floral esters,
→ varietal, by avoiding inhibition of fruity thiols being brought out due to excess ammonium salts.

In addition, ACTIVIT O limits production of SO2, sometimes observed with use of ammonium salts, and improves the effectiveness of sulphiting because it is rich in thiamine, which limits combination phenomena.

SPECIFIC NUTRIENTS FOR SPARKLING WINES

HYDRA PC

1 kg

HYDRA PC optimises rehydration of yeasts by strengthening their plasma membrane.
With HYDRA PC, yeasts are more resistant to the difficult conditions they encounter when inoculating the Starter.
(SO_2, alcohol, pH, sugars, etc.).
Strengthening the membrane allows the yeasts to be less stressed during inoculation of the tirage wine and more resistant to the increase in alcohol content and the carbon dioxide gas concentration during bubble-forming.

EXTRA PM

1 kg

OPTIMISES BOTTLES FERMENTATION, LIMITS REDUCTION-TYPE AROMATIC EXCESSES AND PRESERVES AROMATIC FRESHNESS.

EXTRA PM is a specific fermentation activator for bottles fermentation.
This activator :
→ ensures optimal yeast activity during 'bubble-forming', traditional, Charmat, ancestral, etc.
→ preserves membrane exchange abilities, especially for continuous inoculation,
→ ensures an ideal physiological condition of the yeast, especially in the terminal phase (after 2.5 kg pressure).

MALOLACTIC FERMENTATION ACTIVATORS

NUTRIFLORE FML

1 kg

OPTIMISED NUTRIENT FOR ACCELERATING MALOLACTIC FERMENTATION.

NUTRIFLORE FML provides not just the necessary elements for successful multiplication of bacteria in liquor (amino-acids, minerals, vitamins) but also and above all specific peptides which enhance resistance to acidity in wine. NUTRIFLORE FML is particularly effective in wines with low pH (<3.4).

NUTRIFLORE PDC

250 g

DEDICATED NUTRIENT FOR OPTIMISING THE MALOLACTIC STARTER PROCESS.

NUTRIFLORE PDC activates bacterial enzymatic systems by contributing dedicated nutrients to liquor : specific vitamins, minerals and amino-acids, which unquestionably accelerate the starter process.

FAQ

Does nitrogen richness need to be know before pitching ?

To adapt a sustainable and efficient nutrient strategy, it is effectively better to dose must nitrogen that is to be assimilated by the yeast. On the one hand, this makes it possible to avoid stuck fermentations due to deficiencies and, on the other, overdose of nitrogen which would jeopardise the survival of the yeast, the malolactic fermentation and the sensory quality of wines (sulphurous odours).

Why do you recommend two inputs of nitrogen ?

Generally speaking, it is more efficient to provide nitrogen input after the growth phase, at one third of AF. Often, however, people prefer to divide this input between one third and the beginning of AF for the following reasons:

- to avoid a peak of yeast activity and temperature at the third of AF, due to too much added nitrogen;
- to provide nutrients that are of 100% yeast origin or complex at the beginning of AF to nourish the yeast in the vitamins (especially thiamine) and minerals it needs at that time;
- to foster aromatic syntheses through amino nitrogen provided at the beginning of AF.

In all cases, you must avoid adding ammoniacal nitrogen on its own at the beginning of AF.

Do indigenous yeasts have the same needs in nutrients as selected yeasts ?

Yeasts do not all have the same needs in nitrogen. IOC has characterised the nitrogen needs of each of its speciality yeasts, making it possible to sustain nutrient contributions.

An indigenous yeast can have very variable, unknown needs, which, a priori, are difficult to assess. Unforeseeable variability is regularly responsible for AF stoppages or sensory deviations, as the winemaker cannot choose the suitable nutrient..

Why not just use nitrogen in the form of ammonium salts ?

A nutrient made up of just ammoniacal nitrogen and thiamine is liable to create yeast overpopulation, jeopardising not just the physiological status of each yeast, but also possibly causing induced deficiency in nitrogen. Complex nutrients ACTIVIT and VITISTART are made up of a balanced ratio of ammoniacal nitrogen and amino nitrogen.

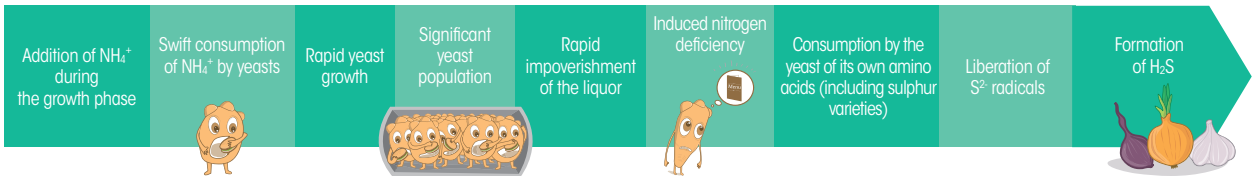
They also contain micronutrients (vitamins and minerals). All these elements make it possible to avoid nutritional unbalance which could lead to kinetic and sensory difficulties. 100% organic-based nutrients ACTIVIT O and ACTIVIT NAT go even further in regulating growth and yeast metabolism, in particular by strongly limiting the production of sulphurous odours. Moreover, these foster the bringing out of aromas, in particular of varietal thiols, whereas excessive ammonium could inhibit such.

What form of ammoniacal nitrogen - phosphate or sulphate salt ?

Some yeasts -but not all- would have increased SO_2 production if ammonium sulphate were added.

For this reason, we would tend to recommend diammonium phosphate if an addition of ammoniacal nitrogen is necessary.

Impact of an addition of ammoniacal nitrogen (NH_4^+) during the yeast growth phase



ŒNOLOGICAL YEASTS

YEASTS FOR BIOPROTECTION

GAIA™

LOW SO_2 SOLUTIONS

SACHET 500 g

NATURAL PROTECTION OF THE HARVEST DURING PREFERMENTARY STAGES

Gaïa™ use during pre-fermentary stages (such as cold pre-fermented macerations) allows a natural protection against micro-organisms alteration due to the action of the Metschnikowia fructicola yeast which helps and prevents the proliferation of undesired metabolite populations (such as the volatile acidity). Sulfiting steps can consequently be limited.
The quite low fermentary action and power of Gaïa™ makes it a safe and active asset during pre-fermentary extraction without triggering the fermentation at an early stage.
Gaïa™ can be used in a range of applications:

At machine harvesting

Anticipate and protect your grapes at the earliest
To avoid any proliferation of microorganisms from the harvest and during transport to the cellar.

During transport of picked fruit

Manage long transport times
Suitable for temperatures >15°C, long transport times, extended waiting times and degraded sanitary conditions.

On the grapes during drying

Limit development of *Botrytis cinerea* during drying process (e.g. amarone)
Reduces the development of rot often observed in the drying chambers.

At the reception of grapes in the cellar

Protect the must for the duration of the pre-fermentation phases
Allows to fight against spoilage microorganisms or the early start of fermentation.

When filling cold pre-fermentation maceration tanks

Fight against rising volatile acidity with limited fermentation start
Fight against *Hanseniaspora uvarum* with limited fermentation start, allowing for extraction of anthocyanins in the aqueous phase.

In the wine press

Limit the risks of starting fermentation and reduce SO_2 additions
Limits the development of fermentative yeasts, especially in case of lower SO_2 adds, to allow a good clarification after pressing.

Out of the press of the white juice for sparkling wines (traditional method)

Limit spoilage and control the sensory profile
With global warming (e.g. leading to higher than desired pH), and the desire to limit SO_2 concentrations, an addition of GAÏA™ at the beginning of filling the settling tank helps to reduce yeast or acetic acid bacteria growth, and limits unwanted aromatic development that will harm the elegance and finesse of sparkling wines made in the traditional method.

In the wine press for white juices or rosé musts

Limit the risk of early start of fermentation and reduce SO_2 additions.
Limits the development of fermentative yeasts, especially in case of lower SO_2 additions, to allow a good clarification after pressing.

Before yeasting for sparkling base wines (Closed tank method)

Limit fermentation start and ethanol production during must warming
The juice warming phase (stored at low temperature) for fermentation can last up to 72 h, resulting in undesirable microbiological development, especially sources of large amounts of acetaldehyde. The addition of GAÏA™ in the cold juice before heating avoids the triggering of unwanted fermentation.

On juice during storage

Protection of juice during storage or transport over extended periods
Maintain the juice in an optimal condition for its use during the year, and to reduce expenses (e.g. refrigeration, filtration) to avoid unwanted fermentation.

YEASTS FOR RED WINES

IOC PRIMROUGE - R 9001

500 g

THE STANDARD FOR VINIFICATION OF EARLY RED WINES.

The IOC PRIMROUGE R9001 strain is used to obtain rounded, aromatic wines, marked by red fruits (strawberry, raspberry) and candy. The wines obtained are characterised by better colour, a clean nose, very fruity and a supple full-bodiedness.
It is mainly suitable for making flattering, rounded wines, from gamay, merlot or syrah, and is ideally suited to liquidphase vinification of red musts.

IOC R 9002

500 g

SPICES, BLACK FRUITS AND WOODINESS.

The IOC R 9002 strain is used to make structured, woody wines for laying down. It brings out aromas blending spices with black fruits. It improves colour fixing phenomena. It also shows good tolerance for high alcohol contents.

IOC R 9008

500 g

BODY, RIPE FRUITS, SALINITY AND LONGEVITY.

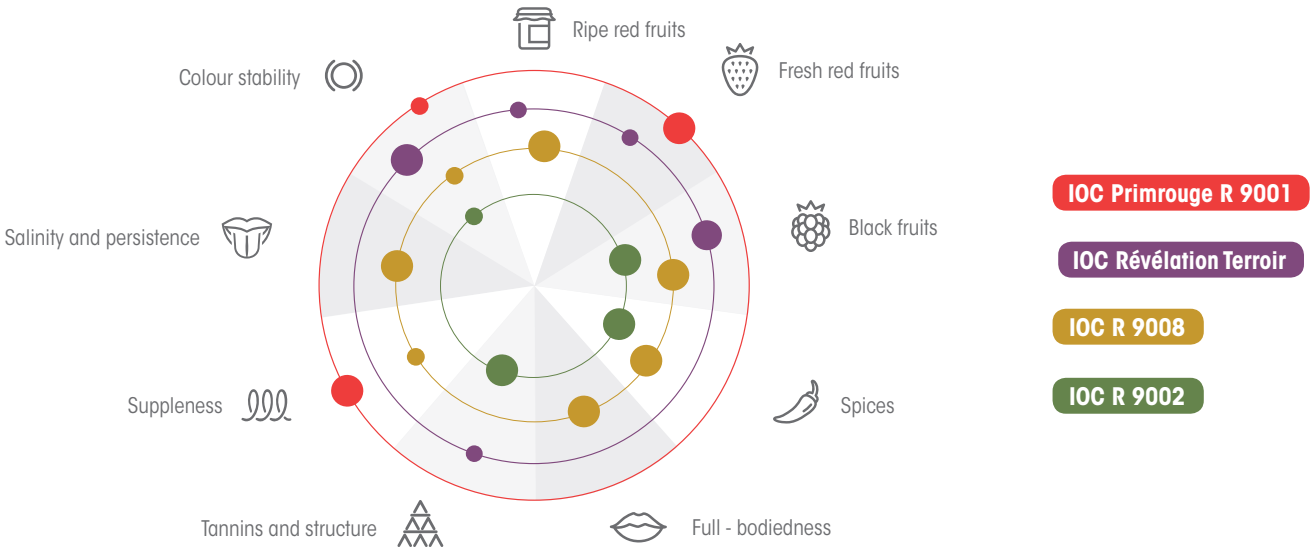
The IOC R 9008 yeast has been selected to develop complex ripe fruit aromas and full-bodiedness in structured red wines from concentrated fully-ripened grapes.
In the difficult conditions of musts from hot wine-growing regions, it helps to limit the perception of dryness and bitterness, while intensifying the hints of minerals and salinity and the length.
It reduces the risks of herbaceous aromas and aggressive tannic sensations on sensitive grape varieties : merlot, cabernet-sauvignon, cabernet franc, carménère, malbec, grenache, etc.

IOC RÉVÉLATION TERROIR

500 g

FINESSE, FRUITINESS AND COLOUR.

IOC REVELATION TERROIR has been selected on pinot noir for its excellent ability to preserve colour. It increases the colouring intensity by 5% to 15% in comparison to numerous selected or indigenous yeasts.
Its essential sensory contribution is to bring out varietal fruity aromas (raspberry, gooseberry, blackberry) of numerous red grape varieties, with a good balance between the freshness of the fruit and its maturity, on finesse and elegance.
IOC Revelation Terroir provides very good results in terms of fruity expression on pinot noir, gamay, grenache noir, merlot, carignan and tempranillo.



YEASTS FOR WHITE AND ROSÉ WINES

IOC RÉVÉLATION THIOLS

500 g

FULL EXPRESSION OF FRUITY THIOLS.

IOC REVELATION THIOLS offers a very good percentage conversion of precursors into varietal thiols and expresses superior aromatic potential to that given by most yeasts, on citrus and passion fruit notes, with limited plant notes.
This strain is specific to white and rosé wines based on the expression of varietal thiols, aromatic compounds responsible for the varietal notes characteristic of numerous grape varieties, such as sauvignon blanc, colombard, picpoul, melon de Bourgogne, muscat, syrah, gamay, pinot noir, cabernet varieties, merlot, tempranillo, negrette, etc.

IOC B 2000

500 g | 10 kg

FRESHNESS AND AROMATIC INTENSITY.

The IOC B 2000 strain facilitates the aromatic fruity expression of white and rosé musts. It is suitable for making fresh, aromatic wines. It is used to obtain different aromatic profiles depending on the fermentation temperature and so combine fermentation and varietal notes harmoniously.
IOC B 2000 is used or vinification of white wines on which aromatic expression is essential.
It is all the more interesting on grape varieties poor in varietal precursors, but also rosés from syrah, grenache, merlot and cabernet.
On rosé wines, IOC B 2000 expresses exotic fruit and citrus aromas.

IOC TWICE

500 g

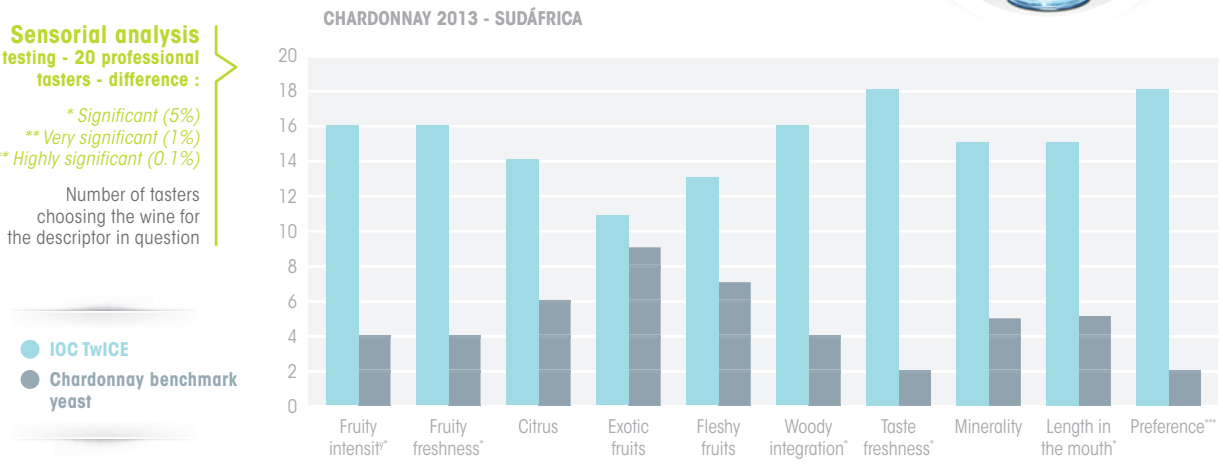
THE PERFECT BALANCE BETWEEN FULL-BODIEDNESS AND FINAL FRESHNESS.

IOC TwICE yeast has been selected by the IFV de Beaune as the most suitable for making fresh, complex and balanced Chardonnay wines. Tests carried out highlight its suitability for enhancing the fresh aromas of citrus (lemon in particular), peach, apricot and flowers.
In a remarkable way, IOC TwICE gives unrivaled fullness and roundness when attacking the palate and in mid-palate, followed by final freshness for perfect balance.
Its excellent suitability for mutage also makes it ideal for mellow or syrupy wines.

Sensorial analysis
pair testing - 20 professional tasters - difference :

** Significant (5%)*
*** Very significant (1%)*
**** Highly significant (0.1%)*

Number of tasters choosing the wine for the descriptor in question



IOC B 3000

500 g

YELLOW FRUITS, FLOWERS AND FULL-BODIEDNESS.

It brings out the intensity and aromatic complexity of wines, on yellow fruit and flower notes, while also contributing to the full-bodiedness and roundness.
Its good fermentation capabilities make it an ally of choice for preventing the risks of sulphurous odours called 'reduction' appearing. Ideal elevage yeast, for making elegant, persistent and rounded wines.

IOC FRESH ROSÉ

500 g

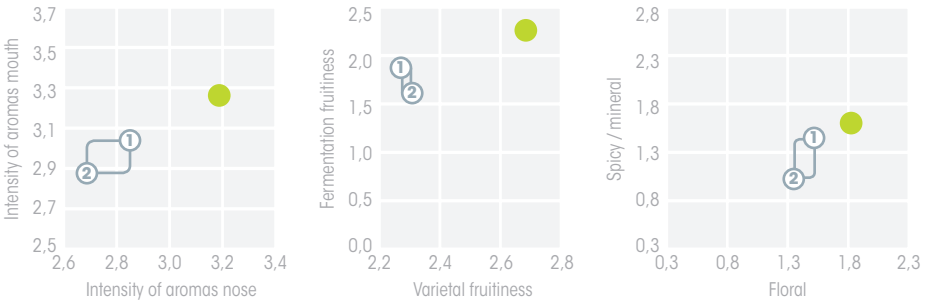
FLORAL AND VARIETAL EXPRESSION OF ROSÉ WINES.

The IOC FRESH ROSÉ strain is used to highlight an aromatic intensity on floral, citrus and spicy notes in rosé wines. The contribution to taste is also essential since it contributes to reducing aggressive sensations such as acidity, dryness and bitterness.
IOC FRESH ROSÉ is particularly well suited to vinification of complex, rounded rosé wines, and particularly for varietal expression of grape varieties such as syrah and cabernet-sauvignon.

EXPERT OPINIONS

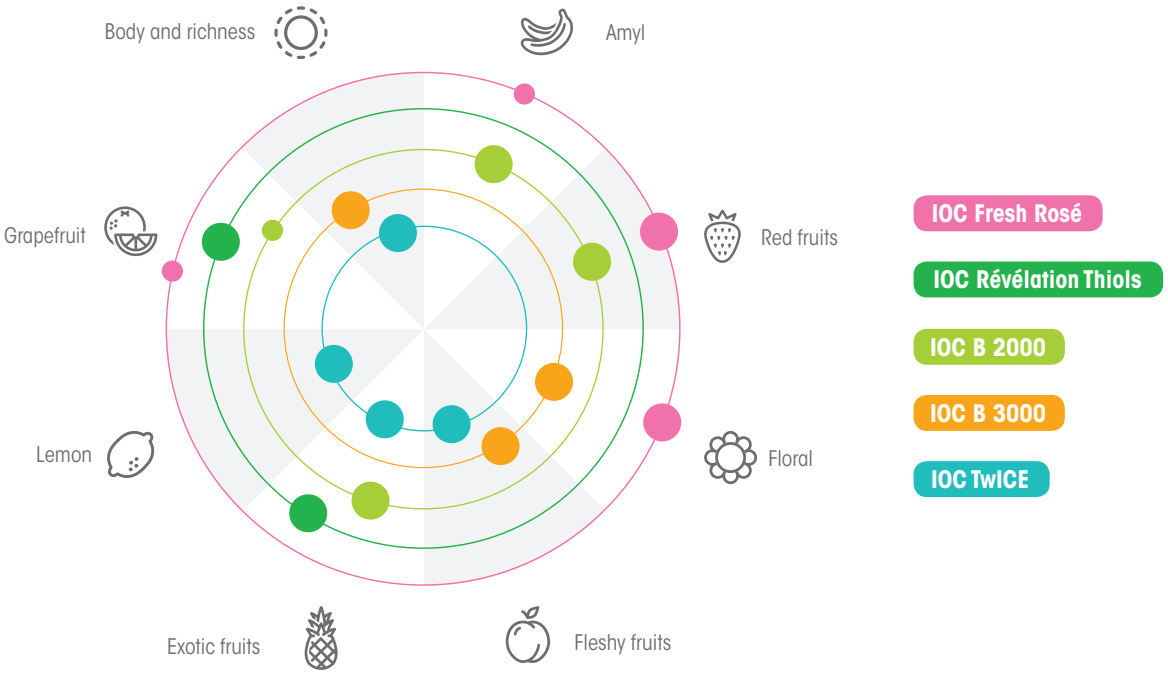
In tasting, this strain mainly produces heightened aromatic intensity with fruity notes, principally for varietals but also fermentations. The aroma also has floral notes which increase the complexity obtained even more.
Globally, the level of preference in early tasting is enhanced with this strain.

Jean-Christophe Crachereau, Œnological practices and products" Experiments Manager, Gironde Chamber of Agriculture.



Experiments carried out by the Gironde Chamber of Agriculture, on cabernet-sauvignon rosé : more fruitiness (plant and fermentation) / floral / spicy

IOC Fresh Rosé ① ② Controls 1 and 2



YEASTS FOR SPARKLING WINES

IOC 18-2007

500 g | 10 kg

THE REFERENCE FOR PRISE DE MOUSSE (BOTTLES FERMENTATION).

A strain selected by the Institut OEnologique de Champagne from the best strains of the great Champagne vineyards.
Excellent adaptation to the most difficult liquors: low pH, low temperature, high alcohol content.
Rapidly established, complete breakdown of sugars and low nutrient requirements.
It is ideally suited to making wines by the traditional method and closed-tank method.
It is also used to deal with stuck fermentations and in this case requires the preparation of a starter culture.

IOC DIVINE

500 g

FAST AUTOLYSIS YEAST FOR THE TRADITIONAL METHOD.

The IOC DIVINE yeast is suited for making sparkling wines produced using the traditional method. It has been selected for the quality of its prise de mousse (secondary fermentation), but also for its autolytic capabilities, which give the wine exceptional richness and full-bodiedness. It is used to make very aromatically-complex and particularly long sparkling wines.

IOC FIZZ

500 g

FOR THE CLOSED-TANK METHOD.

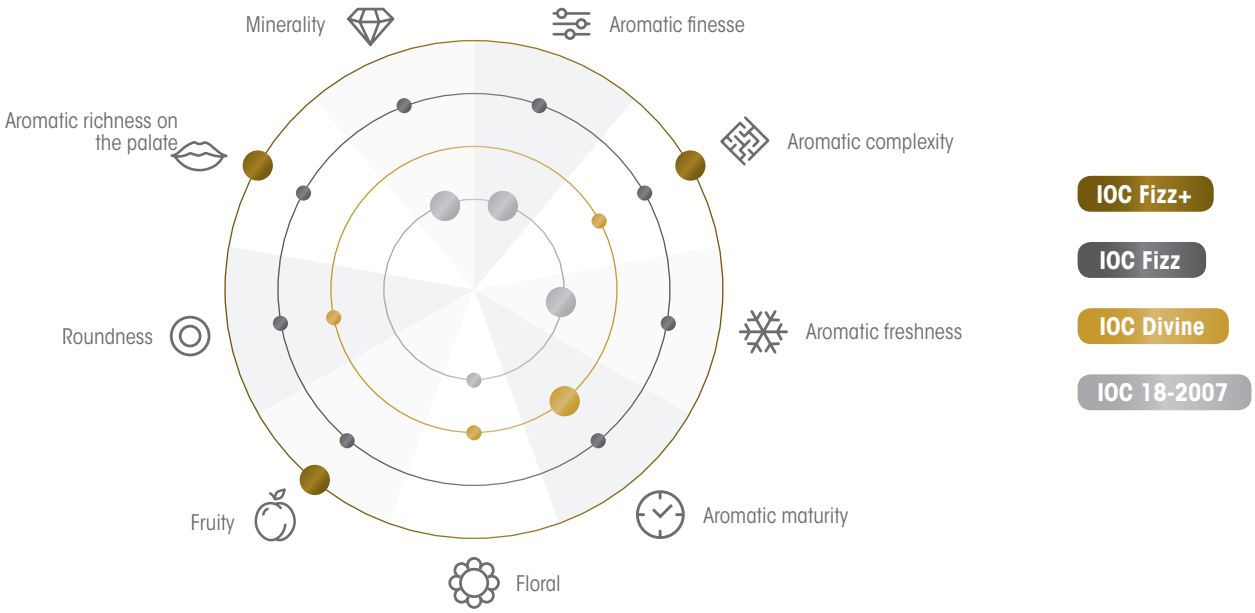
The IOC FIZZ yeast has been selected for vinification of sparkling wines using the closed-tank method.
Its ability to adapt to difficult liquors enables it to provide rapid and complete prise de mousse (secondary fermentation).

IOC FIZZ+

500 g

AROMATIC YEAST BRINGING OUT FRUITY NOTES FOR THE CLOSED-TANK METHOD.

The IOC FIZZ+ yeast has been selected to meet the expectations of sparkling wine production using the Charmat method (closed-tank). It not only has very good fermentation characteristics for prise de mousse (secondary fermentation) as in the first fermentation, but also contributes to the fruity intensity of these wines.



YEASTS FOR WHITE, ROSÉ AND RED WINES

IOC BY

500 g | 10 kg

FOR REGULAR AND COMPLETE FERMENTATION OF LIGHT WHITE, ROSÉ AND RED WINES.

This strain is very resistant to high alcohol contents. It performs a regular and complete fermentation without adding any particular aromatic character to the wine.

IOC HARMONIE

500 g

FOR FINE, STRONG WINES.

It respects the aromatic characteristics of grape varieties and regions. In every case it produces very little volatile acidity. It is used to obtain white and rosé wines with great finesse and red wines with very strong aromas.

IOC 11-1002

500 g

FOR REGULAR AND COMPLETE FERMENTATION OF LIGHT WHITE, ROSÉ AND RED WINES.

This strain is very resistant to high alcohol contents. It performs a regular and complete fermentation without adding any particular aromatic character to the wine.

IOC 11-1002 K

500 g

FOR REGULAR AND COMPLETE FERMENTATION OF LIGHT WHITE, ROSÉ AND RED WINES.

This strain is used to obtain fine wines.
Its killer character helps it get established and gets the fermentation started quickly.
It provides regular and complete fermentations and withstands high alcohol contents well.

EXCEPTIONAL YEASTS : THE NON-CONVENTIONAL ONES

IOC BE THIOLS

LOW SO_2 SOLUTIONS

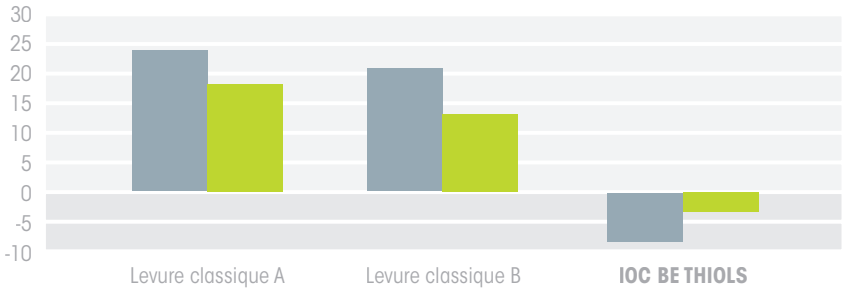
SACHET 500 g

THE NATURAL TOOL FOR OBTAINING THIOLATED WINES WITH LOW SULPHITE CONTENT.

Derived from an innovative selection process assisted by markers, IOC BE THIOLS combines strong expression of fruity thiols with the inability to produce SO_2 and ethanal excesses.
It therefore constitutes a remarkable lever for wine-makers who want to reduce the amount of sulphites in their white or rosé wines. In addition, IOC BE THIOLS cannot produce H_2S, which produces negative sulphurous odours.

Concentrations in total SO_2: differences between wine and must (mg/L)

- **Grenache rosé** (initial sulphiting operation 30 mg/L - pH 3.30 TAV 14% vol)
- **Sauvignon white** (initial sulphiting operation 50 mg/L pH 3.30 - TAV 12.25% vol)



IOC BE FRUITS

LOW SO_2 SOLUTIONS

SACHET 500 g

NEW

MASTERING SULPHITE CONTENTS FOR WINES RICH IN FRUITY ESTERS.

IOC BE FRUIT is the result of an innovative technology for selecting yeasts.
A genuine tool to reveal fruity esters (red fruits, pineapple, citrus notes) in white or rosé wines, moreover it can not produce any SO_2. Furthermore, it allows to reduce the acetaldehyde formation which highly combine sulphites.
IOC BE FRUITS whole characteristics is an exceptional tool to produce sane and safe wines, clear-and-cut conveying intense fresh fruit aromas while limiting sulphite contents at their lowest rate.

IOC BIO

500 g

CERTIFIED ORGANIC YEAST, ENSURING RESPECT FOR VARIETIES AND TERROIRS.

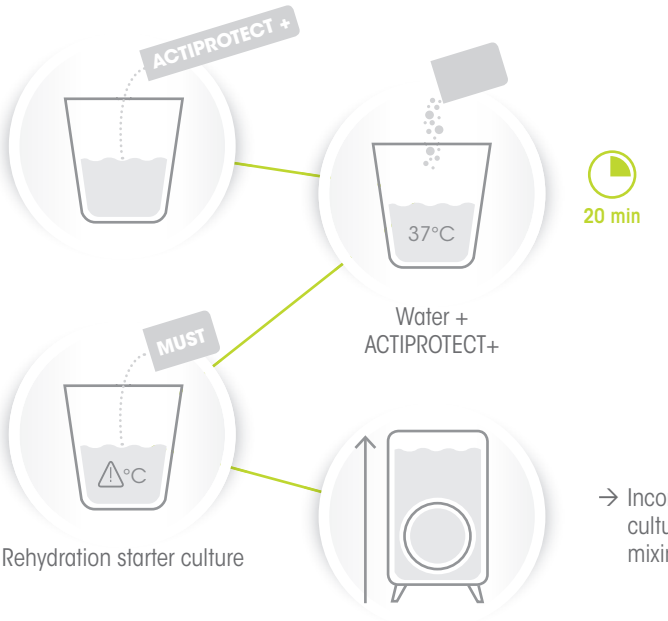
IOC BIO has been selected to preserve wine typicity. It does not act on one aromatic fraction to the detriment of another, and allows the variety to express itself fully, without so-called "technological" aromas.
Derived from an exceptional organic production process which meets all the conditions required by European regulations, it allows wide flexibility of use, on all colours of still wines, as well as bubble formation.

	Type of wine	Character Killer	Alcohol tolerance	Nitrogen requirement	Production of volatile acidity	Production of Glycerol	Fermentation speed
IOC B 3000	White	Sensitive	14 %	moderate	low	high	slow
IOC TwICE	White	Killer	15,5 %	high	low to medium	nd	slow
IOC B 2000	White / Rosé	Killer	14 %	low	very low	low	fast
IOC Rév.Thiols	White / Rosé	Killer	15 %	moderate	low	low	very fast
IOC Fresh Rosé	Rosé	Killer	16 %	moderate	low	low	fast
IOC Primrouge	Red	Sensitive	14 %	high	very low	high	moderate
IOC R 9002	Red	Killer	15 %	high	very low	moderate	moderate
IOC R 9008	Red	Sensitive	16 %	low	low	high	fast
IOC Rév.Terroir	Red	Killer	15 %	high	low	moderate	moderate
IOC 18-2007	Traditional method	Killer	15 % minimim	low	low	moderate	very fast
IOC Divine	Traditional method	Sensitive	14 % minimim	low	moderate	high	moderate
IOC Fizz	Charmat method	Killer	18 %	low	low	moderate	fast
IOC Fizz+	Charmat method	Killer	14 % minimim	low	low to medium	moderate	very fast
IOC BE THIOLS	White / Rosé	Killer	15 %	moderate	low	low	very fast
IOC BE FRUITS	White / Rosé	Killer	14 %	low	very low	low	fast
IOC Bio	All	Killer	15 %	low	low	low	fest

REHYDRATING YEASTS

→ Mix ACTIPROTECT + (30 g/hL of must) in water (20 times the weight of yeast) at 43°C

→ Stir well to avoid lumps.



→ Mix yeasts (20 to 40 g/hL of must) in water at 37°C.

→ Mix gently and leave to rehydrate.

NB : At this stage, it is normal to observe a little effervescence

→ Acclimatise the starter culture at the temperature by adding must progressively.

→ Objective: the difference between the temperature of the starter culture and the must should not exceed 10°C.

→ Incorporate the starter culture in the must, mixing by pumping over.

FAQ

Doesn't using selected strains lead to standardising the taste of my wines ?

On the contrary. The qualities that yeasts can confer on wines essentially depends on the intrinsic potential of the grape; yeasts just bring it out. The results for a given yeast will therefore be different from one must to another because they are linked to this potential.

When should yeasts be added to the must ? Can I wait before inoculating in the pre-fermentation maceration ?

Certain musts may be heavily contaminated with wild-type yeasts and this initial population jeopardises not only the proper establishment of active dry yeast but also the quality of the wine. For this reason, it is essential to add yeast as early as possible, from first vatting for reds that are filled in several steps, after settling for whites and rosés. This includes cold pre-fermentation, where risks remain high. Fractioned yeasting trials (5 g/hL at vatting then 15 g/hL after cold pre-fermentation maceration) show good results in cases where it is difficult to maintain a low temperature.

Pre-fermentation bioprotection of musts and grapes by non-Saccharomyces yeasts can also be considered today to act even earlier without any untimely start-up in fermentation.

As a general rule, what is the right temperature for must when inoculating to ensure optimum establishment ?

You can inoculate without risk when the must temperature is above 8°C. Using the yeast protector is recommended, but what is essential above all is to acclimatise yeasts to the vat temperature by gradually adding must when rehydrating the starter culture.

What is the right yeasts dose ?

The suitable yeast dose depends on the conditions in the must. We recommend a minimum dose of 20 g/hL, which can be increased to 25-30 g/hL if the grapes are over-ripe and/or are microbially altered. A study has also shown that in 25% of cases, yeasts added at only 10 g/hL of juice did not get established.

Is it worthwhile inoculating the same must with different yeasts ?

It may be, particularly to take advantage of complementary specific activities. Nevertheless, to ensure a reliable result and not create inappropriate competition between yeasts, it is better to carry out a complete study into the dynamics of the different populations present. Many associations are actually antagonistic and result in the AF becoming stuck.

LEES ALTERNATIVES

IN FERMENTATION

GLUTAROM

1 kg

EARLY AROMATIC PRESERVATION OF WHITE AND ROSÉ WINES.

GLUTAROM is made up of inactivated yeasts that are naturally rich in glutathione.
Its anti-oxidant properties help GLUTAROM prevent defective aromatic ageing of white wines and the loss of fruity aromas in young wines. It also enables reserve wines to be better preserved.
As a natural source of polysaccharides, it improves the body of white wines. Added at the beginning of fermentation, it fosters the production of glutathione by yeasts.

GLUTAROM EXTRA

LOW SO_2 SOLUTIONS

1 kg

RICH IN REDUCED GLUTATHIONE TO ANTICIPATE THE PRESERVATION OF WINES WITH LOW SULPHITE.

Reduced glutathione (GSH) is a tripeptide that indirectly shows itself to be a powerful antioxidant agent. It effectively reacts with quinones, avoiding agglomeration (which is responsible for the browning of musts and oxidized wines) and the oxidation of aromatic compounds. Even though it is naturally found in grapes, its concentration is often too low to efficiently protect the wine.
GLUTAROM EXTRA is a nutrient resulting from the latest techniques in the selection and production of inactive yeasts with a very high GSH content. If it is added at the beginning of fermentation, in the end it enables you to obtain a wine with a greater concentration of GSH, if the yeast is also correctly fed with organic nitrogen.
If the sulphite concentration is low, the positive effect of this richness in GSH is clear in the aroma, even in red wine.
It has likewise been shown that an addition of inactive yeast rich in GSH can be more efficient for the aromatic content than an addition of pure glutathione, presumably because of the synergies with the nutritional effect of the other yeast compounds.

ELEVAGE

SPHÈRE BLANC

1 kg

RICHNESS, ROUNDNESS AND SENSORY STABILISATION IN ELEVAGE OF WHITE WINES.

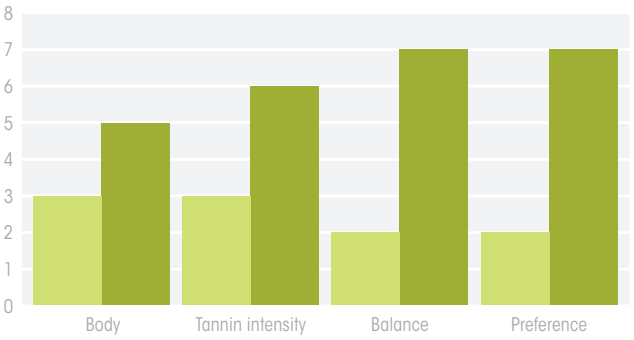
A true selected lees, SPHÈRE BLANC rapidly amplifies perceptions of roundness and richness in white wines. This is particularly useful when the quality of fresh lees is insufficient to envisage this type of result, as well as when lees cause contamination or sulphurous odours.
SPHÈRE BLANC makes an essential contribution to long-term stabilisation of taste and aromatic sensations, through interactions between polysaccharides and wine aromas.

SPHÈRE ROUGE

1 kg

BODY, STRUCTURE AND PERSISTANCE.

A formulation of inactivated yeasts specific to red wines and their phenolic structure, SPHÈRE ROUGE is the fruit of our knowledge of the phenomena of body and roundness. SPHÈRE ROUGE contributes to full-bodiedness while heightening the quality of tannin structure and respecting aromas and taste freshness of wines.



Sphère rouge: body and structural balance

Trial with 20 g/hL on cabernet sauvignon, médoc - 9 tasters

Number of tasters giving better classification to wine

Sphère Rouge Control

SPHÈRE EXPRESS

1 kg

BODY AND SWEETNESS FOR VERY SHORT ELEVAGES.

Particularly rich in free manno-proteins, SPHÈRE EXPRESS produces very quick action (1 to 8 weeks) on body, sweetness and length in the mouth of white, rosé or red wines. It is a sure, qualitative alternative to elevages where time is of the essence.

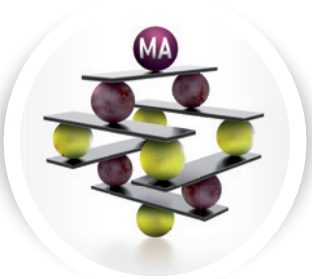
PRE-BOTTLING FINISHING

ULTIMA SOFT

500 g 1 kg

ROUNDNESS AND AROMATIC PERSISTANCE.

UltiMA Soft is a 100% soluble preparation of selected, instantaneously-acting manno-proteins, that in particular helps improve the balance of wines and increase length in the mouth and sweetness. UltiMA Soft provides better integration of the perceived acidity.

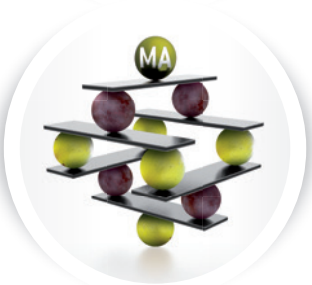


ULTIMA FRESH

500 g 1 kg

FRESHNESS, SWEETNESS AND LENGTH IN THE MOUTH.

UltiMA Fresh is a 100% soluble preparation of selected, instantaneously-acting manno-proteins, that, among other things, helps increase length in the mouth and sweetness, while reducing bitterness for optimum taste balance.
UltiMA Fresh brings out the fresh taste of wines.

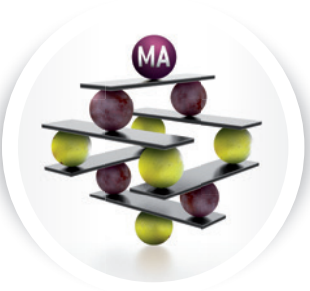


ULTIMA READY LIFE

0,5 L | 1 L | 5 L

ROUNDNESS AND AROMATIC PERSISTENCE.

UltiMA Ready Life is a selected mannoprotein-based solution which in particular enhances integration of perceived acidity.
UltiMA Ready Life also helps improve balance of wine, length in the mouth and sweetness.
Certain mannoproteins contribute to tartaric stabilisation of wines.
UltiMA Ready Life can help bubbles last longer in sparkling wines.



NEW

ULTIMA READY EXPRESSION

1 L | 5 L

FOR REGULAR AND COMPLETE FERMENTATION OF LIGHT WHITE, ROSÉ AND RED WINES.

This strain is very resistant to high alcohol contents. It performs a regular and complete fermentation without adding any particular aromatic character to the wine.

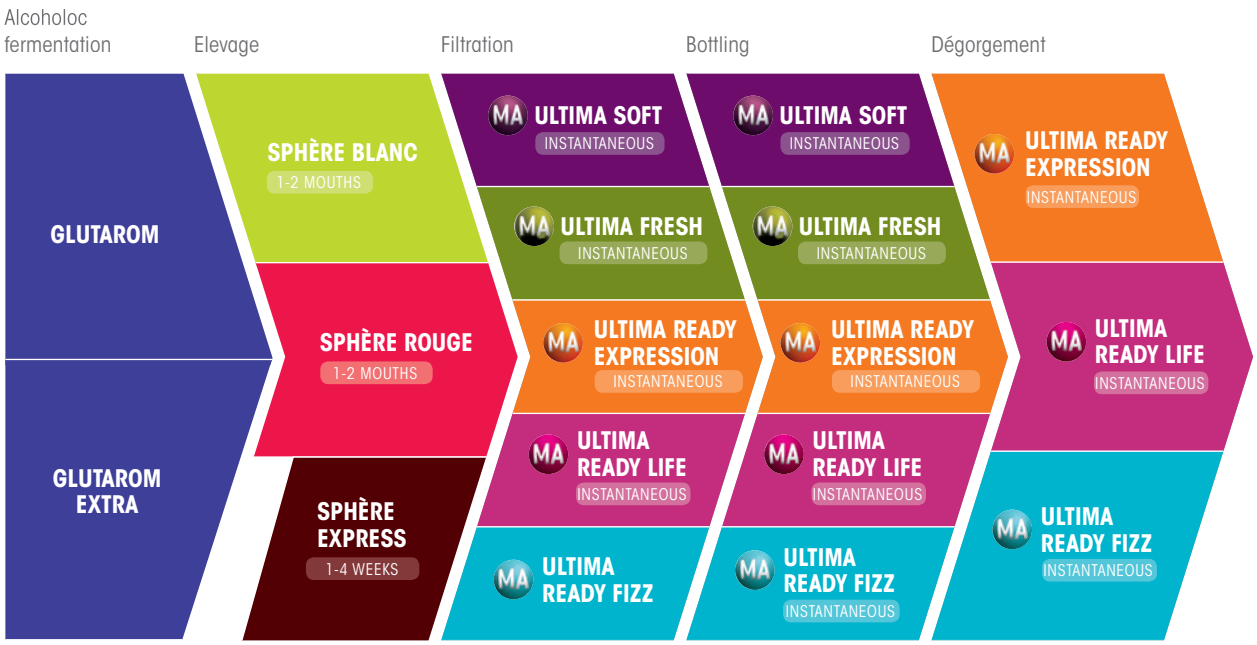
ULTIMA READY FIZZ

? L | ? L

OPTIMISATION OF THE TASTE PERCEPTION OF SPARKLING WINES MADE USING THE TANK METHOD.

UltiMA Ready Fizz is a solution made with selected manno-proteins which balances out the creamy sensation and perception of freshness linked to the fizziness of wines made using the Charmat method. UltiMA Ready Fizz contributes to the full-bodied flavour and long finish of these wines, limiting the aggressive taste of the bubbles and supporting the elegance of the fizz. .

YEAST PRODUCTS : preferential windows for action



ŒNOLOGICAL ENZYMES

MODE OF ENZYME ACTION

- **CRUST :** wax, fatty acid — no enzyme action
- **SKIN :** tannins, anthocyanins aromatic substances and/or aroma precursors → **Pectinases** → **Cellulases** → **Glucanases**
- **FLESH :** must → **Pectinases**
- **SEEDS :** catechins, tannins — no enzyme action

ACTIONS OF CLARIFYING ENZYMES

ENZYMATIC ACTIVITIES	EFFECT ON THE MUST AND WINE
Action on pectin : - Pectin esterase (PE) - Pectin lyase (PL) - Polygalacturonase (PG) **Action on glucans :** - Glucanase	- Effects on viscosity of the juice, suspended particles and poor filterability of the wine - Improves decanting of sediments

INOZYME

50 g | 250 g | 1 kg | 10 kg

RAPID CLARIFICATION OF MUSTS.

INOZYME is a preparation of highly-purified synergistic pectolytic enzymes that accelerates decanting must sediments, by hydrolysing pectins.

INOZYME LIQUID

500 mL | 1 L

RAPID, EASY CLARIFICATION OF MUSTS.

INOZYME LIQUID is a suspension of synergistic pectolytic enzymes that accelerates decanting must sediments, by hydrolysing pectins. Its liquid form makes it easy to use, particularly in large-scale vinification processes and for musts from thermo-vinification.

INOZYME TERROIR

50 g | 250 g | 10 kg

HIGH CLARIFYING POWER FOR MUSTS UNDER DIFFICULT CONDITIONS.

The particularly high endo-polygalacturonase activity of INOZYME TERROIR provides extremely rapid hydrolysis of pectins in the must. Its activity remains high despite difficult use conditions (low pH and low temperature).
In red wine, INOZYME TERROIR rapidly clarifies musts highly-loaded with pectins from thermo-vinification.

INOZYME CRYO

1 L | 25 kg

STRONG ACTIVITY AT LOW TEMPERATURE AND EASE-OF-USE.

INOZYME CRYO is a liquid preparation of highly-concentrated pectolytic enzymes which accelerates decanting of must sediments, even at low temperatures (from 5°C), by hydrolysing pectins. This liquid formulation therefore helps accelerate your clarification processes, while acting at low temperatures to facilitate sedimentation and limit microbial development.

INOZYME CLEAR

100 g

CLARIFICATION AND AROMATIC CLARITY OF GRAPE MUSTS ALTERED BY *BOTRYTIS* CINEREA.

Optimised clarification : dual pectolytic and glucanase activity to reduce polymers coming from the grape and Botrytis. Its restores aromatic clarity to altered musts.

INOZYME THERMO

1 L | 10 L | 20 kg

A THERMOSTABLE LIQUID ENZYME IDEAL FOR THE CLARIFICATION OF GRAPE JUICES DERIVED FROM HEATED VINIFICATION TECHNIQUES.

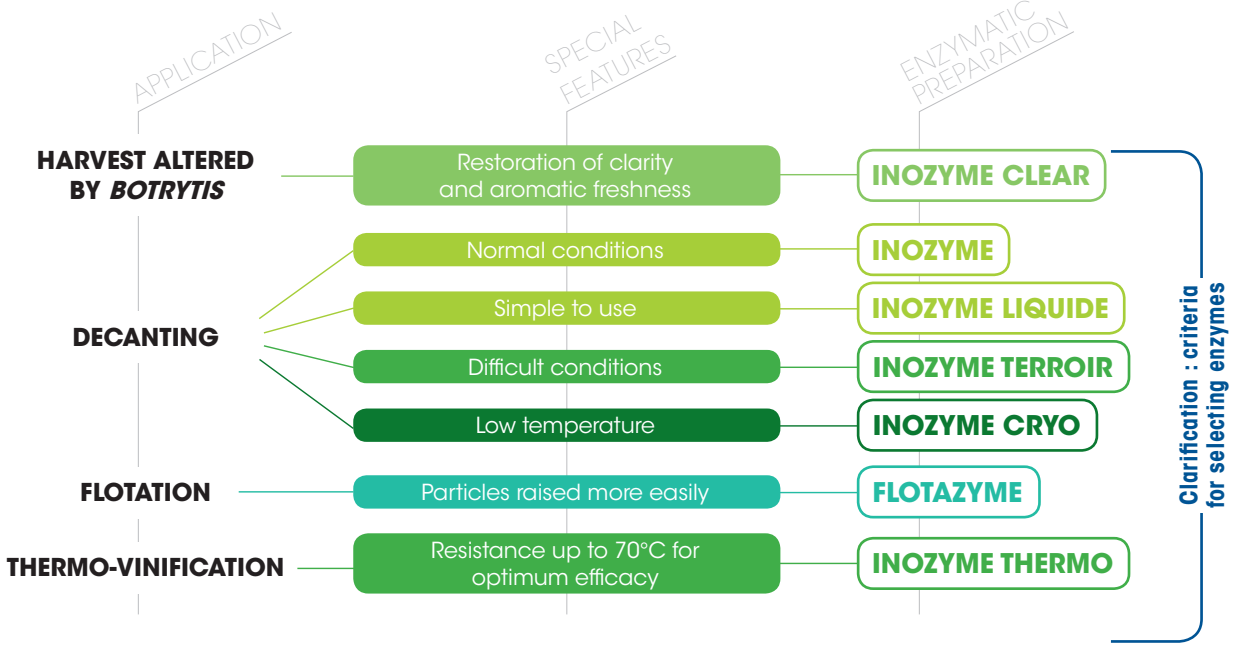
INOZYME THERMO is a liquid preparation of highly concentrated pectolytic enzymes that accelerate the settling out of particles from the winemust by hydrolysing the pectin.

FLOTAZYME

1 L | 25 kg

RAPID, EASY CLARIFICATION OF MUSTS, BY FLOTATION.

FLOTAZYME is a suspension of synergistic pectolytic enzymes that accelerates raising sediments to the surface.
Its liquid form makes it easy to use, particularly in large-scale vinification processes.



EXTRACTION AND MACERATION ENZYMES

ENZYMATIC ACTIVITIES	EFFECT ON THE MUST AND WINE
- Pectin Lyase (PL) - Polygalacturonase (PG)	- Break down pectins from the middle lamella and primary wall. - Promote the release of tannins and anthocyanins found in granular form inside the vacuole.
- Cellulase - Hemicellulase	- Promote release of tannins associated with the cell wall. - Promote extraction of aroma precursors.

EXTRAZYME

100 g | 250 g

EXTRACTION OF JUICE AND QUALITATIVE CONSTITUENTS FROM WHITE OR BLACK GRAPES.

EXTRAZYME is suitable for making wines from ripe black grapes with low extractability. So it increases the yield of free-run wine, as well as improving the colour (more intense, more purplish-red hue) and enhancing tannic structure; EXTRAZYME reduces the frequency and intensity of mechanical actions and the risks of crushing.
For direct-pressed white or rosé wine, EXTRAZYME used before or in the press increases the juice yield and shortens pressing cycles. A larger dose will also accelerate settling of these musts.

EXTRAZYME LIQUIDE

1 L | 20 L

EXTRACTION OF JUICE AND QUALITATIVE CONSTITUENTS FROM WHITE OR BLACK GRAPES.

EXTRAZYME LIQUID is suitable for making wines from ripe black grapes with low extractability.
So it increases the yield of free-run wine, as well as improving the colour (more intense, more purplish-red hue) and enhancing tannic structure.

EXTRAZYME TERROIR

100 g | 250 g

COLOUR EXTRACTION, STRUCTURE AND BODY IN MACERATION OF RED HARVESTS.

The broad, active spectrum of EXTRAZYME TERROIR make it the appropriate enzyme formulation for making wines from high-potential black grapes. For this type of harvest, it rapidly stabilises the colour and concentrates the structure while enclosing it by the action of polysaccharides from hydrolysed pectins.
For less rich grapes, EXTRAZYME TERROIR improves colour and tannins significantly, while limiting crushing and mechanical work needed to extract them. The free-run juice/press wine ratio is improved, contributing to the overall quality of the wine obtained: more body, more colour, more structure but less astringency.

EXTRAZYME MPF

100 g

SELECTIVE EXTRACTION OF ACTIVE SUBSTANCES SUITABLE FOR LOW MACERATION TEMPERATURES.

EXTRAZYME MFP [cold pre-fermentation maceration] is an enzyme preparation with highly-concentrated pectolytic and secondary activities to compensate for reduced enzymatic activity due to low operating temperatures.
For red wine vinification, used during maceration, EXTRAZYME MPF promotes rapid extraction of anthocyanins and the aromatic potential.
For white wine vinification, EXTRAZYME MPF improves the extraction of aromatic substances and precursors in skin maceration.

EXTRAZYME ROSÉ

1 L

AN ENZYME DEDICATED TO MAKING AROMATIC ROSÉ WINES.

EXTRAZYME ROSÉ is a liquid pectolytic formulation whose main and secondary activities fully enhance the specific aromatic potential of rosé musts :

→ powerful clarifying action, even at very low temperatures, ideal for obtaining rosé musts of medium turbidity (80-150 NTU) for a "thiolated aroma" typology; or very low turbidity (20-80 NTU) weighted towards "fruity esters".
→ pre-clarifying and extracting action on grapes and/or in maceration of sediments, to extract a juice rich in aromatic precursors to produce wines that are rich in fruity, varietal thiols.
→ no anthocyanase activity, to avoid denaturing the colour, nor cinnamoyl-esterase activity, to avoid loss of aromatic freshness.

AROMATIC EXTRACTION ENZYMES

ENZYMATIC ACTIVITIES	EFFECT ON THE MUST AND WINE
- Pectinases - Hemi-cellulases - Cellulases	- Extraction of aroma precursors
- Glycosidases	**Hydrolyses odourless aroma precursors to odorous volatile substances** - Varietal aroma : key to the aromatic profile + typicality of the wine. - Enhancers precursors from aromatic grape varieties: Release of varietal aromas from grape varieties such as muscat, riesling...

EXTRAZYME BLANC

100 g | 250 g | 1 kg

EXTRACTS AND BRINGS OUT VARIETAL AROMAS DURING MACERATION OF WHITE GRAPES AND SEDIMENTS.

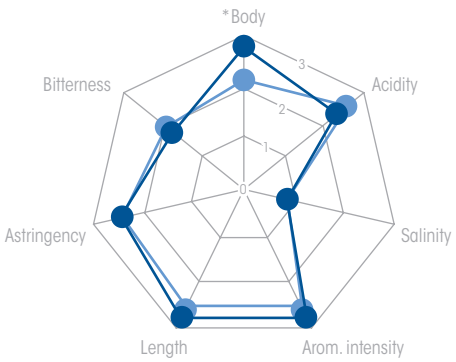
EXTRAZYME BLANC is a formulation developed to obtain more aromatic white wines.
EXTRAZYME BLANC allows better extraction of varietal thiol precursors, which the appropriate yeast can then bring out.
EXTRAZYME BLANC also gives wines richer in aromatic terpenes.

EXTRAZYME FRUIT

100 g

EXTRACTS AND BRINGS OUT VARIETAL AROMAS DURING MACERATION OF RED AND SAIGNÉE ROSÉ MUSTS.

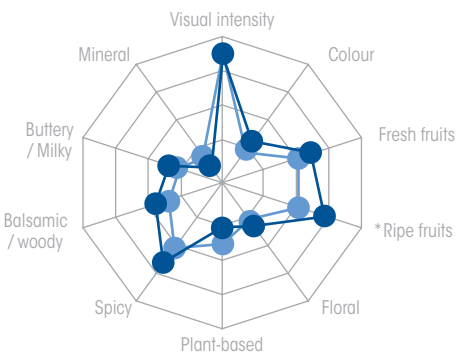
EXTRAZYME FRUIT is a formulation developed to obtain both richness and fruity aromas from black grapes. Its propensity for bringing out substances such as beta-damascenone makes it an enhancer for fruity aromas obtained in alcoholic fermentation. EXTRAZYME FRUIT is used in traditional or pre-fermentation maceration and can also be used on saignée rosés

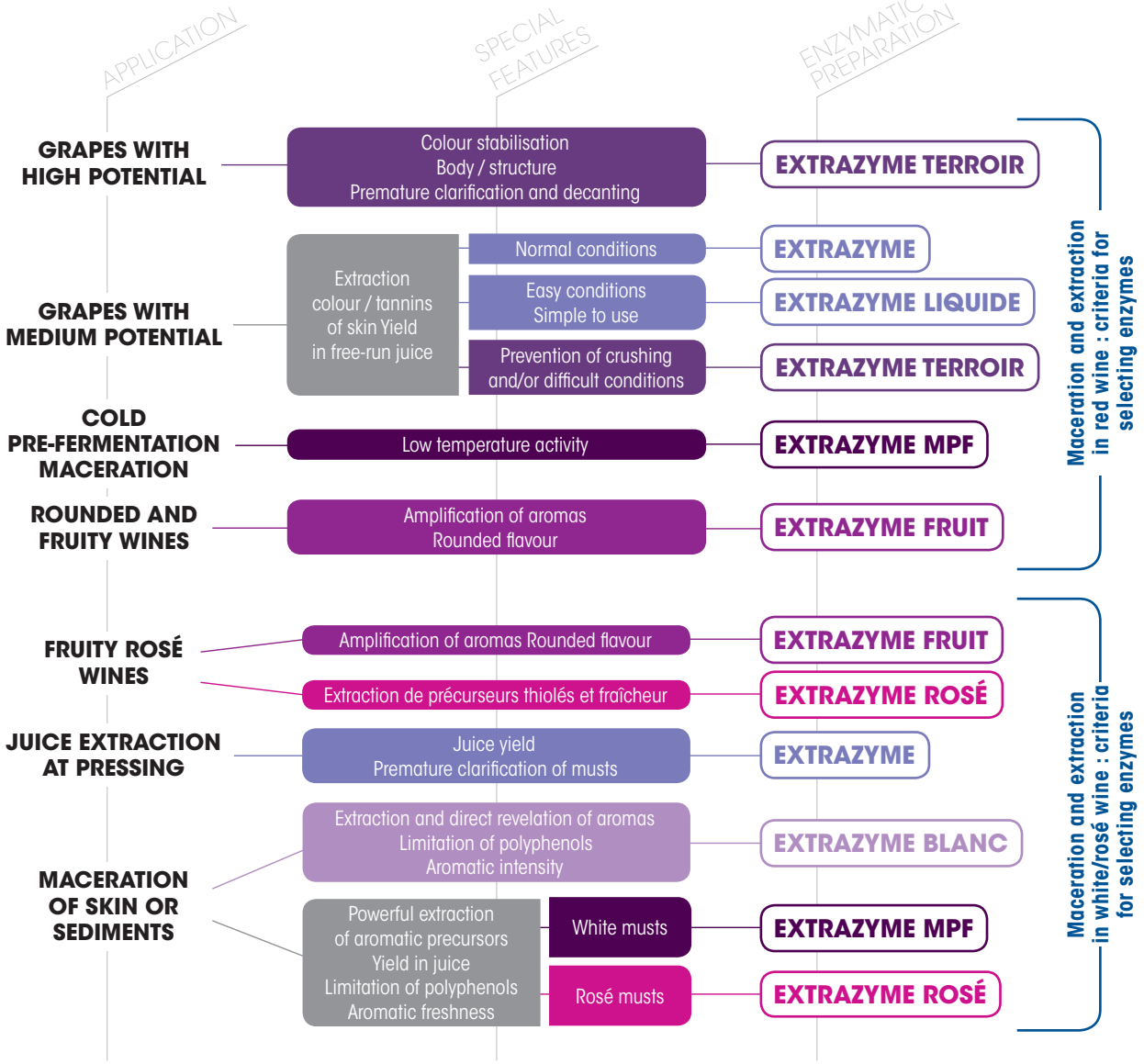


Taste examination
Trial on merlot, Gironde, 2011

Extrazyme Fruit — Control

Olfactory and visual examinations
Trial on merlot, Gironde, 2011





STABILISATION AND ELEVAGE ENZYMES

ENZYMATIC ACTIVITIES	EFFECT ON THE MUST AND WINE
- Glycosidases	**Hydrolyses odourless aroma precursors to odorous volatile substances** - Varietal aroma: key to the aromatic profile + typicality of the wine. - Enhancers precursors from aromatic grape varieties: Release of varietal aromas from grape varieties such as muscat, riesling...
- ß-glucanase	- Promotes yeast autolysis: boosts fullness and richness of wines. - Promotes filterability under altered harvesting conditions.
- Lysozyme	**Inhibition of Gram+ bacteria (lactic acid bacteria)** - Avoids the lactic acid spike when the alcoholic fermentation is stuck. - Inhibition of malolactic fermentation after the alcoholic fermentation, stabilisation after malolactic fermentation before bottling.

FLUDASE

100 g

CLARIFICATION AND FILTERABILITY OF WINES UNDER DIFFICULT CONDITIONS.

For enhanced clarification of wines from Botrytis-affected or hard-to-clarify musts. Its ß-glucanase activity contributes to eliminating the glucans responsible for clarification problems by fining or filtration.

LACTOLYSE

500 g

PREVENTION OF LACTIC ACID SPIKES AND INHIBITION OF MALOLACTIC FERMENTATION.

LACTOLYSE (lysozyme) can be used on white or rosé wines to inhibit malolactic fermentation (MLF) or in red wine to delay it (e.g. if using carbonic maceration). It is also used to control microbiological risks :

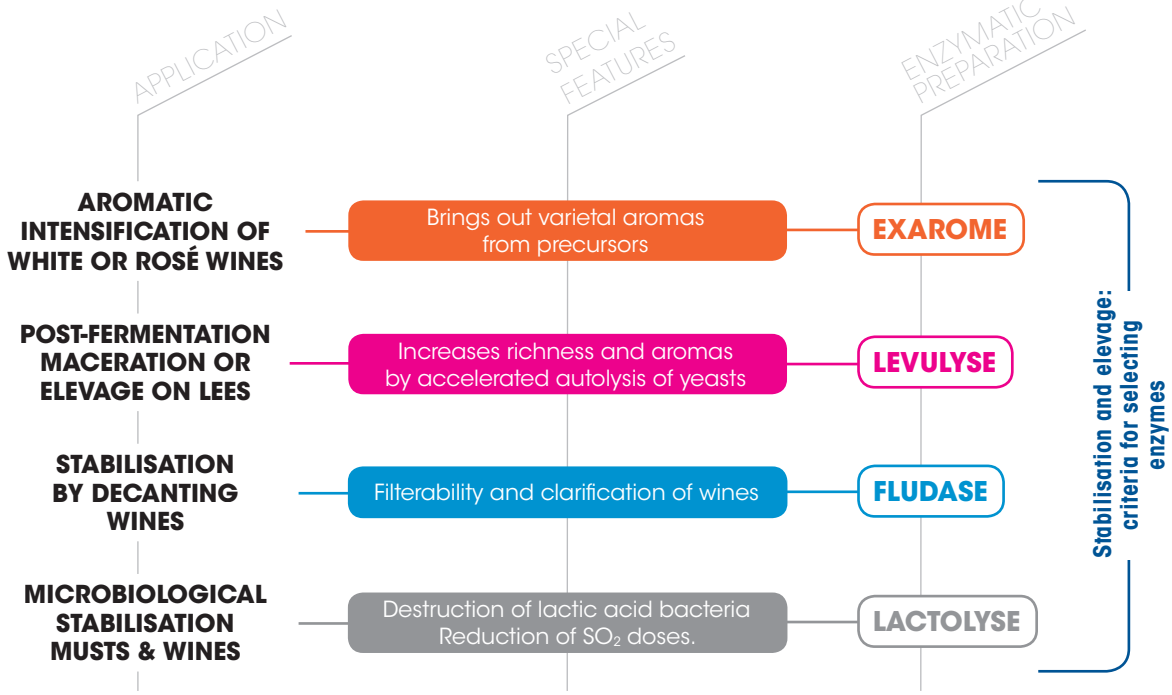
1/ If the fermentation gets stuck, LACTOLYSE blocks development of lactic acid bacteria and so avoids the lactic acid spike. The alcoholic fermentation can then be restarted with a starter culture preparation.
2/ LACTOLYSE is used preventively, when the vinification method used tends to increase volatile acidity. Adding lysozyme to marc considerably reduces final volatile acidity.
3/ After MLF, LACTOLYSE can also be used to reduce bacterial activity and so the risks of producing biological amines, negative sulphurous substances and acetic acid.

EXAROME

100 g

REVELATION OF VARIETAL AROMAS DURING ELEVAGE OF WHITE WINES.

EXAROME provides wines richer in aromatic terpenes, by hydrolysing their gycosylated precursors to active aromas. These terpenes will increase the overall fruity intensity of wines.



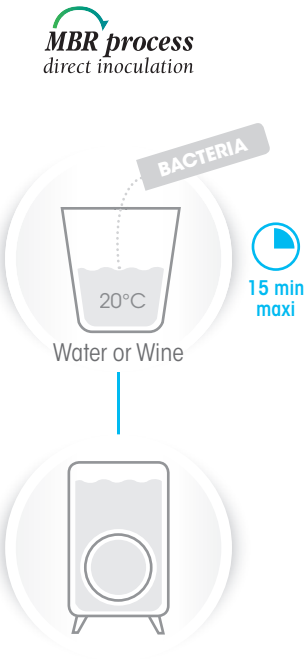
SELECTED MALOLACTIC BACTERIAS

WHY PERFORM BACTERIAL INOCULATION?

- → Malolactic fermentation can be triggered just after alcoholic fermentation, making wines available more rapidly. The time-savings are significant and the cellar-work is easier.
- → Sanitary quality is assured because no biological amines are formed.
- → The risks of organoleptic deviations due to the indigenous bacteria or sluggish malolactic fermentations are avoided.
- → Certain inoculation techniques can preserve the must against the development of *Brettanomyces*, responsible for phenolic tastes.
- → By choosing a inoculation technique, or the bacteria used, we can intervene and favourably direct the sensory profile of the wine towards a given objective.

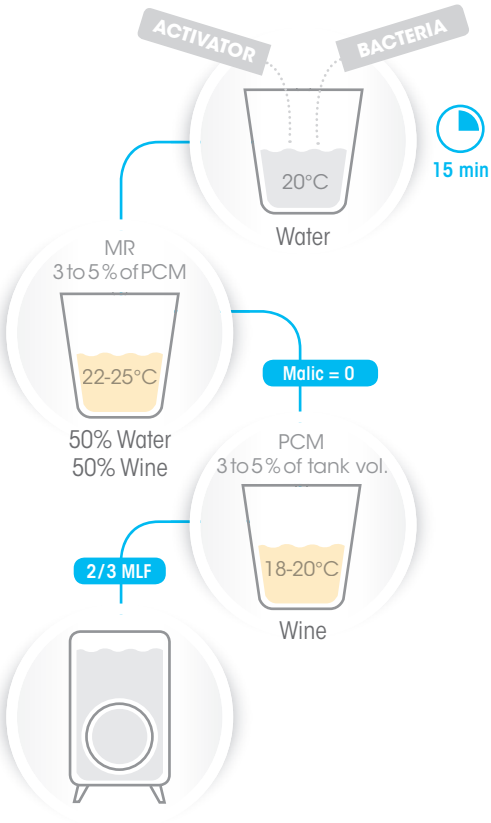
DIFFERENT TYPES OF INOCULATION

DIRECT INOCULATION



INOCULATION WITH 1 ACCLIMATISATION STEP

INOCULATION IN 2 STEPS (1 ACCLIMATISATION PHASE & 1 STARTER PHASE)



LACTIC ACID BACTERIAS

INOBACTER

DOSES FOR INOCULATING | 25 hL | 100 hL | 500 hL | 1 000 hL | 2 000 hL

OENOLOGICAL BACTERIA WITH RE-ACTIVATION AND ACCLIMATISATION PHASES (STARTER).
FOR WINES AND MUSTS WITH VERY LOW PH.

INOBACTER has been selected for the quality of its overall performance and for its ability to conduct malolactic fermentation in the most difficult wines.
The INOBACTER strain is remarkable for its resistance to low pH and its high malolactic activity. Its use requires preparation of a starter culture.

MAXIFLORE ELITE

DOSES FOR INOCULATING | 25 hL | 100 hL | 500 hL

CONTRIBUTION TO STRUCTURE AND AROMATIC COMPLEXITY.

MAXIFLORE ELITE gives wines particularly interesting sensory properties. On red wines, this malolactic fermenter contributes to increasing the sensation of structure and body, while emphasising spicy aromas. On white must, it can boost dry fruit notes, but also protect fresher aromas, by early inoculation.
MAXIFLORE ELITE is probably one of the malolactic fermenters that tolerates the widest range of conditions.
Combining 1-Step® acclimatisation efficiency with its specific characteristics of withstanding low pH, low temperatures, SO_2 and high alcohol content, this is an ally of choice to make your malolactic fermentation secure, and it is used for early inoculation (at 2/3 of the alcoholic fermentation) as well as sequentially.
Tolerances : pH > 3,1 (if low total SO_2)
Alcohol < 15,5% vol.

MAXIFLORE SATINE

DOSES FOR INOCULATING | 25 hL | 100 hL | 500 hL

REDUCED ASTRINGENCY AND PREVENTION OF BUTTERY AROMAS.

MAXIFLORE SATINE is the recommended bacteria for fermentation of wines made from very ripe grapes. Its talents go further, since it has the ability to produce only a very small quantity of diacetyl. This is why MAXIFLORE SATINE is used to preserve the aromatic purity of wines by significantly limiting the preponderance of buttery notes.
Tolerances : pH > 3,25
Alcohol < 16% vol.

INOFLORE

DOSES FOR INOCULATING | 2,5 hL | 25 hL | 250 hL

TO OBTAIN FRUITY WINES BY CO-INOCULATION.

INOFLORE appears to be particularly well suited for use in yeast/bacteria co-inoculation, in which circumstances it has one of the most efficient kinetics. Furthermore, used in this way, INOFLORE produces a very low level of diacetyl (buttery/milky mask) and contributes to bringing out and preserving fruity aromas, particularly esters. It is indisputably THE bacteria for co-inoculation and fruity wines.
Tolerances : pH > 3,25
Alcohol < 14% vol.
INOFLORE is used by direct inoculation.

EXTRAFLORE

DOSES FOR INOCULATING | 2,5 hL | 25 hL | 250 hL

FOR SIMPLIFIED CONTROL OF MALOLACTIC FERMENTATION.

EXTRAFLORE is a bacteria that withstands a vast range of wine conditions. It is chosen for its simplicity in use, because it is suitable for direct inoculation, which always allows its development and activity.
Malolactic fermentation of white, red and rosé wines. Used in sequential inoculation, it contributes to sweet buttery notes and overall complexity.
Tolerances : pH > 3,15
Alcohol < 14% vol.

VINIFICATION
CLARIFICATION

BENTONITES

Grape proteins are well-known for causing formation of cloudiness in white and rosé wines. Precipitation of these proteins causes a protein haze.

Bentonite is a clay from the Montmorillonites family and it is recommended to provide good clarification and deproteinisation of musts and wines. It is the only effective treatment against protein haze.

Proteins are macromolecules made up of amino acids, positively-charged at the pH of wine, while suspended bentonite forms negatively-charged particles that attract proteins, forming heavy particles that precipitate.

BENTOSTAB

POWDER | 1 kg | 5 kg | 25 kg | GRANULATED | 1 kg | 5 kg | 25 kg

NATURAL SODIUM BENTONITE, WITH HIGH DEPROTEINISING POWER, INTENDED FOR STABILISING AND CLARIFYING WHITE AND ROSÉ MUSTS AND WINES.

Its high deproteinising power is used to remove the proteins responsible for protein haze.
The fine particle size of BENTOSTAB gives it optimum capability to swell in water and a very large capacity to remove colloids.
BENTOSTAB has also been selected for its great ability to preserve the sensory characteristics of musts and wines.
BENTOSTAB is also available as granules, making it very easy to use.

INOBENT

1 kg | 5 kg | 25 kg

ACTIVATED SODIUM BENTONITE PROVIDING VERY GOOD CLARIFICATION OF WHITE AND ROSÉ WINES.

INOBENT is a very good flocculating agent. It facilitates sedimentation of lees at the end of alcoholic fermentation.
It has low deproteinising power and therefore does not remove the elements necessary for the second alcoholic fermentation, and provides better performance of bubble formation.
INOBENT has been selected to preserve all the organoleptic qualities of wines.

BENTONITE L 100

10 L | 1 000 L

SOLUTION OF 100 G/L NATURAL SODIUM BENTONITE FOR STABILISING AND CLARIFYING MUSTS.

BENTONITE L 100 has been selected for its great ability to preserve the sensory characteristics of musts and wines.
The liquid formulation makes it easier to use.

PRODUCTS FOR RESISTING OXIDATION

Qi-No[Ox]

1 kg | 5 kg | 15 kg

THE NATURAL SOLUTION TO OXIDATION OF MUSTS IN WHITE AND ROSÉ WINES.

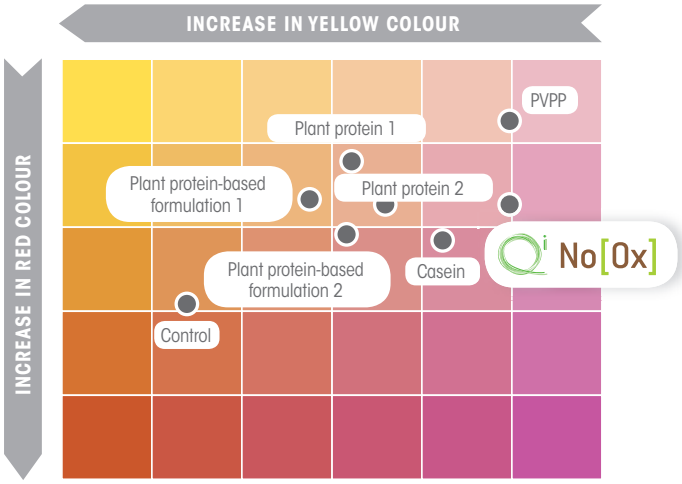
Qi-No[Ox] is a unique and innovative technological ancillary made up of polysaccharides of non-animal origin that is allergen- and synthetic product-free. Its efficacy and swift action enable it to combat oxidative excesses, in both must and wine, while preserving the intrinsic qualities of the initial product.

Qi No[OX] is used for :

→ **Protecting the colour of white and rosé wines** by eliminating iron and copper which are the main catalysers of oxidation, and interacting with polyphenols.

→ **Preserving the aromatic freshness of wines** by durably protecting polyphenols against oxidation and efficiently preserving varietal thiols through the anti-free radical properties of Qi No[Ox].

→ **Erasing organoleptic defects** by eliminating bitterness and oxidative notes, while at the same time preserving sensory and taste properties.



Coordinates - chromametry a* and b*

Grenache rosé, treated during alcoholic fermentation at 40 g/hL (micro-vinification)

Wine treated with Qi'No[Ox] has a slight yellow tint, almost equivalent to that treated with PVPP, and less than other methods that can applied in œnology. Oxidised polyphenols which are responsible for orangey tints, rejected by consumers, are thus efficiently eliminated.

POTASSIUM CASEINATE

1 kg | 5 kg | 20 kg

POTASSIUM CASEINATE is a treatment agent for preventing oxidation of musts and white and rosé wines. It eliminates the characteristic brown colours due to oxidation, since POTASSIUM CASEINATE has particular affinity with oxidised polyphenols.
With botrytised harvests, POTASSIUM CASEINATE constitutes a suitable treatment which will stabilise wines against oxidation haze.

P.V.P.P.

1 kg | 20 kg

PVPP is used for preventive and curative treatment of oxidation in white and rosé wines.
PVPP is formed from macromolecules organised in a lattice. It acts by adsorbing oxidised and oxidisable polyphenols, forming bonds between the phenolic hydroxyl group and an amide bond of the PVPP, so removing the brown colour.
In organoleptic terms, we see a reduction in bitterness and an improvement in freshness and aromas.

INOFINE V

1 kg | 5 kg | 15 kg

ALLERGEN-FREE PLANT-BASED PROTEINS DESIGNED TO COMBAT OXIDATION OF MUSTS AND WINES, WHILE CONTRIBUTING TO THEIR CLARIFICATION.

INOFINE V is a pea protein specifically selected for :
→ its reactivity with oxidised and oxidisable compounds,
→ its efficiency flocculating suspended materials or those to be sedimented,
→ its organoleptic qualities,
→ its ease of use.

INOFINE V MES

5 L | 10 L

ALLERGEN-FREE PLANT-BASED PROTEINS DESIGNED TO COMBAT OXIDATION OF MUSTS AND WINES, WHILE CONTRIBUTING TO THEIR CLARIFICATION.

INOFINE V has been developed in liquid formulation for 2 purposes:
→ Immediate use (time-saving: no particular preparation requirements),
→ Achieving particularly high technical quality, including flocculation and quick sedimentation.

ANTI-OXIDATION FORMULATIONS

	BENTONITE	POTASSIUM CASEINATE	PVPP	PEA PROTEIN	CELLULOSE
Freshprotect	●		●		●
Colorprotect V	●		●	●	
Polyoxyl	●		●		
Bentolact S	●	●			

FRESHPROTECT

1 kg | 5 kg | 20 kg

FRESHPROTECT PREVENTS AND ELIMINATES OXIDATION FROM MUSTS AND WINES WITHOUT USING ALLERGENIC SUBSTANCES.

This complex formulation comprises **PVPP, bentonites, cellulose and gum arabic** :
→ absorbing a part of the oxidisable and oxidised phenolic compounds from musts and white and rosé wines,
→ adsorbing oxidases, proteins responsible for oxidising certain phenols,
→ reducing bitter sensations as well as herbaceous notes, while preserving the organoleptic properties of the must or wine.

COLORPROTECT V

POWDER | 1 kg | 5 kg | 25 kg

TO PREVENT OXIDATION OF MUSTS AND WINES AS WELL AS PINKING.

COLORPROTECT V significantly reduces oxidation phenomena. Its formulation results from a synergistic effect between **bentonites, PVPP and plant proteins**.

COLORPROTECT V is designed for all oxidation phenomena :
→ protection of musts displaying sensitivity to oxidation,
→ reduction of the brown coloration in oxidised white wines,
→ marked reduction in pinking phenomena,
→ maintenance of the organoleptic qualities of musts and wines, while eliminating bitterness and herbaceous notes.

COLORPROTECT V contains no substances listed as allergens.

COLORPROTECT V MES

1 L | 5 L | 10 L

COMPLEX BASED ON BENTONITE AND CASEIN.

COLORPROTECT V MES has been developped in liquid formulation for an easier use.

POLYOXYL

POWDER 1 kg | 5 kg | 20 kg — LIQUID 10 L | 1 000 L

POLYOXYL IS PREPARED FROM PVPP AND SODIUM BENTONITE.

It combines the clarifying and stabilising properties of the carefully selected bentonite with the action of PVPP against phenolic compounds implicated in the bitter taste and plant aromas of certain wines.
It improves the profile of wines made from altered harvests or delicate pressings (harvests affected by mildew, high pressures used for pressing, pruning, etc.).

POLYOXYL L 100

100 L | 1000 L

LIQUID FORMULATION PREPARED FROM PVPP AND SODIUM BENTONITE.

It improves the profile of wines made from altered harvests or delicate pressings (harvests affected by mildew, high pressures used for pressing, pruning, etc.).

BENTOLACT S

1 kg | 5 kg | 25 kg

COMPLEX BASED ON BENTONITE AND CASEIN.

BENTOLACT S significantly reduces oxidation phenomena.
This formulation is designed for all oxidation phenomena :
→ Reduction of the brown coloration in oxidised musts and white and rosé wines.
→ Reduction of bitterness sensations caused by oxidation.

RIDDLING AIDS

PHOSPHATES MAZURE

1 L | 5 L | 10 L

PHOSPHATES MAZURE are a co-adjuvant promoting cohesion and elimination of the deposit formed during bottles fermentation, so facilitating automatic or traditional turning. They enhance the action of CLARIFIER S.

INOCLAIR 2

POUDRE 1 kg | LIQUIDE 1 L | 10 L

INOCLAIR 2 is used to reduce the turning time on racks and on automatic systems. It can be used equally well with clumping or traditional yeasts. It forms a non-stick deposit that slides easily.
INOCLAIR 2 is also available as a liquid formulation, making it easier to use.

CLARIFIANT BK

1 kg

It facilitates sedimentation of yeasts into a compact deposit. It comprises bentonite with poor deproteinising power and kaolin able to form a non-stick deposit. This selection has been made to maintain the behaviour and finesse of the bubbles.

CLARIFIANT S

1 L | 5 L | 10 L

CLARIFIANT S, combined with PHOSPHATES MAZURE, is IOC's reference turning adjuvant. Robust and multi-purpose, CLARIFIANT S is suitable for all types of wine and different turning methods. It maintains all the basic taste characteristics of wines.

CLARIFIANT XL

1 L | 5 L | 10 L

CLARIFIANT XL is an optimised turning adjuvant, made from pure bentonite and a silicate providing excellent packing down of the sediment. Combining these components provides high clarification and sedimentation power, particularly effective for difficult turning. No other co-adjuvant is present or needed for turning.
CLARIFIANT XL provides a compact, non-stick and easily-removed deposit. Clarity of the wine is improved, making it perfectly bright after turning.

FINING PRODUCTS

Finings are protein-based products added to wine to flocculate, i.e. to agglomerate with unstable or suspended particles. When these formed particles have gown sufficiently, they sediment rapidly.

Thus, fining musts and wines improves their clarity, brightness, filterability, colloidal stability, microbiological stability and taste :

For improved brightness, clarity and filterability

Fining removes suspended particles responsible for the cloudiness.

The filterability of wine means its ability to be filtered. It depends mainly on the nature of suspended particles. It is determined by calculating the maximum volume to blocking or Vmax, which is used to give an indication of the filterability of wines and so specify the filter media to be used and the performance of the filtration cycle.

For greater stability over time

The stability of a wine results from the persistence of clarity and absence of a deposit after bottling.

Fining eliminates particles responsible for cloudiness or likely to create a haze, such as colouring material, certain polysaccharides and a proportion of any metals present. In the special case of white and rosé wines, fining inhibits the risk of protein haze, which is one of the main causes of cloudiness in these wines.

To refine sensory characteristics

In addition to the visual appearance, finings is used to fix a proportion of the tannins responsible for astringency and bitterness, and to promote clarity and the finesse of aromatic expression.

Fining is an important step that requires preliminary steps to be carried out in the laboratory in order to choose the most appropriate fining agent and the optimum dose.

FISH-BASED / ISINGLASS FININGS

Isinglass finings are favoured for quality white and rosé wines because they are very delicate and do not require tannins to be present to act. These finings yield remarkable brightness and greatly improve clarity, while refining the sensory characteristics of the wine.

CRISTALLINE

POWDER 1 kg | LIQUID 21 kg

CRISTALLINE is a high purity fish-based fining agent using slow flocculation to remove the finest suspended particles, which then sediment rapidly.
CRISTALLINE is available as powder and liquid for ease of use.
It is used to give very great precision to the nose while softening the vivacity of certain wines.

CRISTALLINE PLUS

100 g | 1 kg

CRISTALLINE PLUS is a mixture of high purity fish-based fining and citric acid, stabilised with potassium metabisulphite, making it ready-to-use.

CRISTALLINE SUPRA

100 g | 1 kg

CRISTALLINE SUPRA is a mixture of lyophilised, pre-hydrolysed fish-based fining powder (for faster dispersion in wine) and citric acid, stabilised with potassium metabisulphite. Cristalline Supra goes into solution much more quickly than traditional fish-based finings.

GELATINE-BASED FININGS

Gelatine combines with albumin and tannins contained in the wine, so flocculating colloidal substances making the wine cloudy or likely to make it cloudy. They are also used to improve suppleness of wines rich in phenolic compounds.

COLFINE

POWDER 1 kg | 25 kg — LIQUID 5 L | 23 kg

COLFINE is hydrolysed porcine gelatine intended for fining red wines.
It is characterised by a high quantity of surface charges, enabling it to interact with colloidal substances.

COLFINE is intended for :
→ stabilising the colloidal state by removing suspended particles,
→ enhancing the organoleptic potential by removing tannins responsible for astringent characteristics,
→ contributing roundness and suppleness.

COLFINE is recommended for young, tannic red wines and press wines, to refine the polyphenolic structure.

COLLE PERLE

POWDER 1 kg — LIQUID 1 L | 5 L | 10 L | 22 kg

COLLE PERLE is fully-hydrolysed porcine gelatine (0° Bloom) at 150 g/L.
It is characterised by a high quantity of surface charges, enabling it to interact with colloidal substances.

COLLE PERLE is intended for :
→ stabilising the colloidal state by removing suspended particles,
→ Bringing out the organoleptic potential of wines by promoting aromatic expression and refining their polyphenolic structure.

COLLE PERLE is recommended for clarifying red wines to improve aromatic characteristics while maintaining the structural balance of the wine.

INOCOLLE

1 L | 5 L | 10 L | 22 kg | 1 000 L

INOCOLLE is a solution of very pure, partially-hydrolysed porcine gelatine (~ 15° Bloom) at 100 g/L.
Its strong electric charge and molecular weight distribution make it a reference fining agent to stabilising the colloidal state of white, rosé and red wines, and contributing brightness and clarity.
INOCOLLE clarifies musts and wines while maintaining their structural and aromatic potential.
It is used when fining white wines, in combination with TC SOLUTION or GELOCOLLE.
It is also used for flotation.

EGG ALBUMIN-BASED FININGS

TRADICOLLE

POWDER 1 kg | 25 kg

TRADICOLLE is an egg-based preparation designed for fining and clarifying quality red wines.
Egg albumin causes precipitation of suspended particles and unstable polyphenols.
This fining agent is appropriate for quality red wine because it preserves the polyphenolic structure of wines, intended to maintain and provide excellent colloidal stability while preserving the aromatic qualities and typicality of the wine.

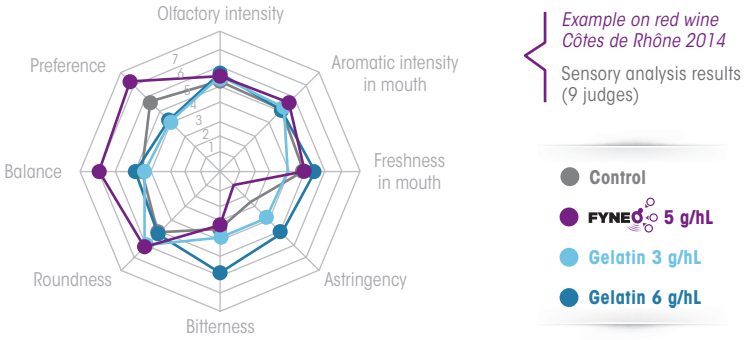
ALTERNATIVE FINING - YEAST PROTEIN EXTRACT

FYNEO

5 kg

AN INNOVATIVE ALTERNATIVE PROCESS FOR FINING WHITE, ROSÉ AND RED WINES.

Granulated yeast protein extract: contains no substance tested as an allergen in line with European Directive 2007/68/CE.
The life of a wine is closely linked to that of yeast. Today, yeast extends its benefits to the process of refining and fining wines, using an agent that is both profoundly innovative and respectful of a natural and healthy oenology.
FYNEO, a yeast protein extract, is the outcome of several years of research, in collaboration with Richard Marchal (Laboratory of OEnology and Applied Chemistry – University of Reims Champagne-Ardenne), both in terms of application and production processes. Extracted proteins have high concentration and significant molecular weight (>15 KDa) which give excellent fining properties.
FYNEO is a top-grade clarifier fostering rapid sedimentation.
FYNEO refines wines by eliminating harsh and bitter end notes, while preserving aromatic quality.
FYNEO comes in granulated form to facilitate dispersion.



FLOTATION ADJUVANT

Qi UP

1 kg | 5 kg | 15 kg

QI UP IS A UNIQUE AND INNOVATIVE ADJUVANT FLOTATION MADE UP OF DERIVATIVES OF CHITIN, THAT IS ALLERGEN- AND SYNTHETIC PRODUCT-FREE.

Its efficacy and swift action enable it to float in all types of musts. Qi'Up makes it possible to preserve all the organoleptic qualities of musts and wines derived from it.

In this example of rosé must, we have compared the action of Qi'Up with a gelatine of porcine origin. The two methods followed the same vinification process (same vinified volume, identical yeast strain...). Sensory analyses were carried out within 3 months following alcoholic fermentation and in accordance with the principle of quantified descriptive profiles.

OTHER FININGS

GELOCOLLE

1 L | 5 L | 10 L | 25 kg | 255 kg | 1 200 kg

FACILITATES FLOCCULATION AND ACCELERATES SEDIMENTATION DURING FINING OPERATIONS.

GELOCOLLE is a solution of silica gel. It is used in combination with organic fining agents to optimise fining. Highlycharged GELOCOLLE silica particles will react with proteins in the organic fining agent and form flocks.
By sedimenting, they bring down suspended particles making the wine cloudy.

FISHANGEL

POWDER 500 g | 1 kg — LIQUID 1 L | 5 L | 10 L

FINING FOR WHITE AND ROSÉ WINES, SPECIALLY DESIGNED FOR RAPID SEDIMENTATION, EXCELLENT BRIGHTNESS OF WINES AND GREAT SUPPLENESS.

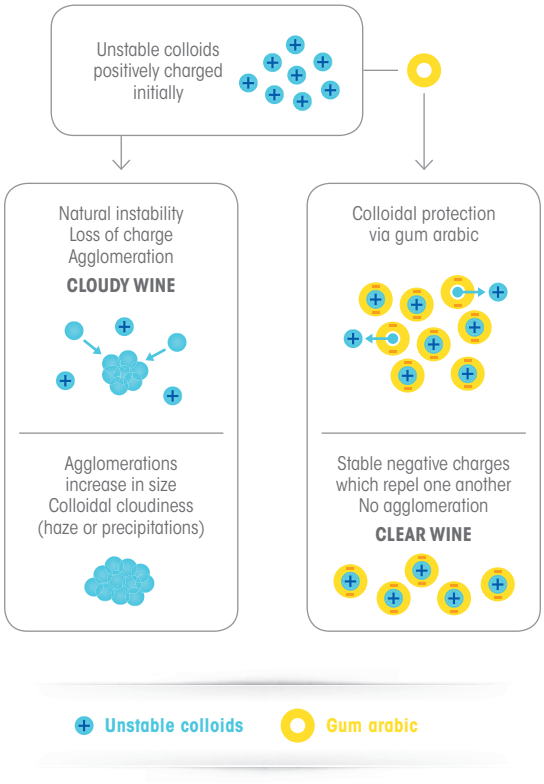
FISHANGEL is a formulation based on 2 protein fining agents : fish finings and gelatine.
FISHANGEL not only has perfect clarifying and stabilising action, but also improves filterability of wines and significantly increases their brightness and filterability.

STABILISATION

ARABIC GUMS

HOW GUM ARABIC ACTS ON WINE

Gum arabic acts essentially as a protective colloid that counters precipitation of suspended particles. It fosters dispersion and suspension of colloidal substances by creating a lattice around them which prevents them from agglomerating.



EFFECTS ON WINES

There are two main families of gums arabic - stabilising and enclosing, each possessing remarkable properties.

STABILISING

Flashgum | Inogum | Inogum MF | Gomme arabique SD

Protecting against

- Precipitations of colouring material
- Metal precipitations (ferric and cupric)
- Tartrate precipitations, boosting metatartaric acid

Maintaining in suspension molecules liable to flocculate (including after disgorging for sparkling wines)

ENCLOSING

Flashgum R | Flashgum R MF

Reducing astringency

Heightens **body, roundness and pleasure** on the palate and enhances the sensory impression of wines.

STABILISING GUMS ARABIC

FLASHGUM

1 kg | 25 kg

THIS INSTANTLY-DISSOLVING ARABIC GUM COMES FROM VEREK OR KORDOFAN ACACIA AND IS THE MOST EFFECTIVE PROTECTIVE AGENT FOR COLLOIDAL SOLUTIONS.

FLASHGUM is used for preventive treatment :
→ precipitation of colouring materials,
→ ferric and cupric metal hazes,
→ tartrate precipitation by boosting METATARTARIC ACID.

The porous structure of FLASHGUM particles provides immediate dissolution in wine.

GOMME ARABIQUE SD

1 L

GOMME ARABIQUE SD is a 300 g/L solution of arabic gum, purified and specially selected for sparkling wines.

This gum comes from Verek Acacia, well known for having rich protein fractions and therefore very high protective capacity.

GOMME ARABIQUE SD inhibits aggregation of unstable colloids responsible for cloudiness and deposits after disgorging sparkling wines, particularly rosé.

This gum is used in preventive treatment for its ability to :
→ oppose flocculation of unstable colouring material in red wines,
→ boost the action of METATARTARIC ACID against tartrate precipitation,
→ prevent metal hazes by avoiding flocculation of cupric/ferric complexes

Moreover, GOMME ARABIQUE SD has been selected for its surface-active properties, providing better stabilisation of the bubbles.

GOMME ARABIQUE 300

22 kg | 1 100 kg

GOMME ARABIQUE 300 IS A SELECTED AND PURIFIED SOLUTION FROM VEREK AND SEYAL ACACIA.

This gum is made up of stable macromolecules that inhibit the aggregation of unstable colloids responsible for cloudiness and deposits in the bottle.

GOMME ARABIQUE 300 is used for preventive treatment of :
→ precipitation of colouring materials,
→ ferric and cupric metal hazes,
→ tartrate precipitation by boosting METATARTARIC ACID.

This gum is also used to contribute roundness and body to wines.

INOGUM

INOGUM 200 | 5 L | 22 kg | 1 070 kg | INOGUM 300 | 1 L | 5 L | 22 kg | 1 100 kg

INOGUM preparations are acacia gum solutions, selected and purified, derived from the Verek acacia, well-known for its richness in protein fractions and consequently its very high protective power.

INOGUM :
→ inhibits the aggregation of unstable colloids which produce cloudiness and deposits in the bottle,
→ opposes flocculation of unstable colouring material in red wines,
→ enhances the action of METATARTARIC ACID with regard to tartaric precipitations,
→ prevents metallic hazes by avoiding flocculation of copper/iron complexes.

INOGUM MF

1 L | 10 L | 25 kg

A SOLUTION OF GUM ARABIC FROM THE SENEGALESE ACACIA COMPATIBLE WITH MICROFILTRATION.

INOGUM MF is obtained from a single production, compatible with microfiltration, acting as a protective colloid against colour and with good structuring capacity.
INOGUM MF :
• is adapted to microfiltration
• acts as a protective colloid against unstable particles
• stabilises colour
• provides structure, body and sweetness.

ENCLOSING GUMS ARABIC

FLASHGUM R

POWDER 1 kg | 25 kg — MES 5 L | 10 L | 22 kg

FLASHGUM R IS AN INSTANTLY-DISSOLVING ARABIC GUM FROM SEYAL ACACIA.

Its 100% natural polysaccharides reduce the astringency and increase the impression of body and roundness.
FLASHGUM R is also used as a protective colloid to stabilise phenolic compounds.
FLASHGUM R is offered in liquid form making it easier to use (5 L, 10 L and 22 L).
If making sparkling wine, Flashgum R can be added to wines before tirage.

FLASHGUM R MF

1 L | 10 L | 25 kg | 1 100 kg

FLASHGUM R MF IS A SOLUTION OF 20% ARABIC GUM OBTAINED FROM ACACIA SEYAL, FILTERED, SULFURED AT 0.5%.

FLASHGUM R MF is formulated from high quality Arabic gum, selected for the stabilizing and organoleptic properties linked to these natural polysaccharides it contains. FLASHGUM R MF harmonizes the structure of weak wines and increases the impression of volume and fullness in mouth. In young red wines marked by excessive astringency FLASHGUM R MF masks the excessive tannicity and re-establishes the right balance of flavors. FLASHGUM R MF provides wines with protection against various forms of chemical and physical instability; it is used as protective colloid to stabilize phenol compounds.

TARTARE STABILISATION

METATARTARIC ACID

1 kg

METATARTARIC ACID prevents the risks of tartrate precipitation. It acts as a crystallisation inhibitor against potassium bitartrate, but also calcium tartrate.
It is added to wine before bottling or in the transport liquor for traditional methods.
METATARTARIC ACID is also available in solution for ease of use.

CREME DE TARTRE

1 kg | 5 kg | 25 kg

CREME DE TARTRE or potassium bitartrate, is essential for optimum tartrate stabilisation of wines. It acts as a crystallisation seed that starts the formation of potassium bitartrate crystals and accelerates sedimentation of endogenous crystals. It optimises the transfer into the cold, whatever the process used (continuous or by contact).
Our choice is to use micronised CREME DE TARTRE, to guarantee and optimise its effectiveness.

CALCIUM TARTRATE

25 kg

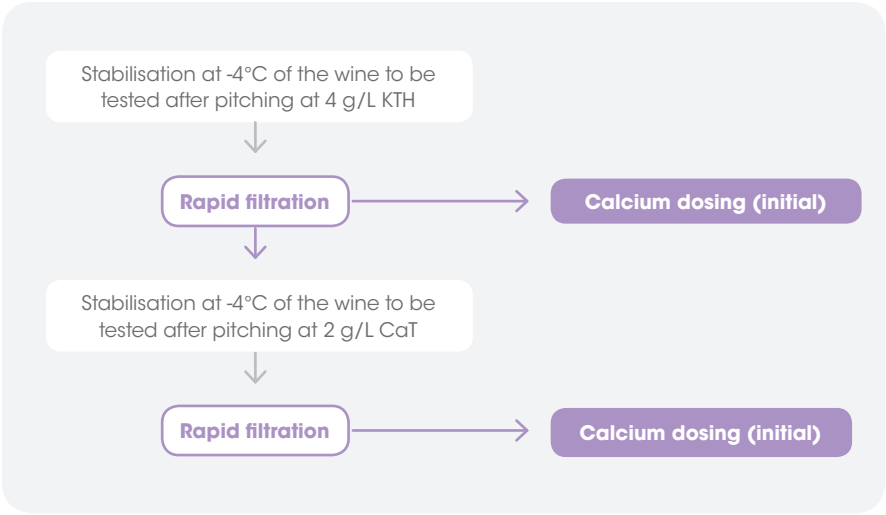
CALCIUM TARTRATE is essential for optimum tartrate stabilisation of wines that contain a high calcium content liable to for precipitates in the bottle.
It causes preferential crystallisation of calcium tartrate, significantly reducing Ca^{2+} levels in wines.

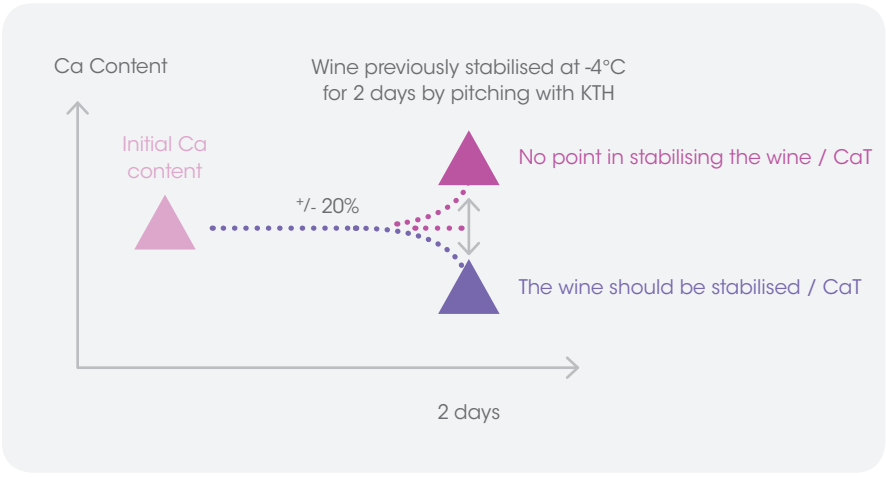
DUOSTAB

25 kg

DUOSTAB can be used in a single step to cold-stabilise the 2 tartrate salts responsible for crystals forming in the bottle and racking in the traditional method : KBT and CaT.
DUOSTAB starts the formation of potassium bitartrate and calcium tartrate crystals, so optimising transfer into the cold, whatever the process used (continuous or by contact).

Determination of precipitation risks for calcium in wines

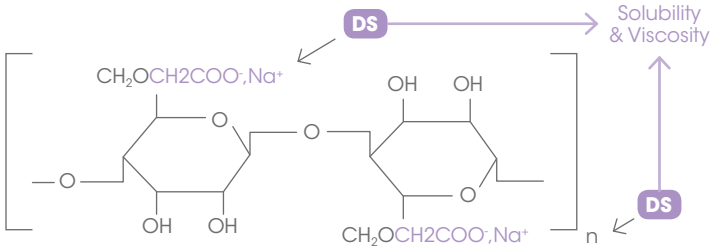


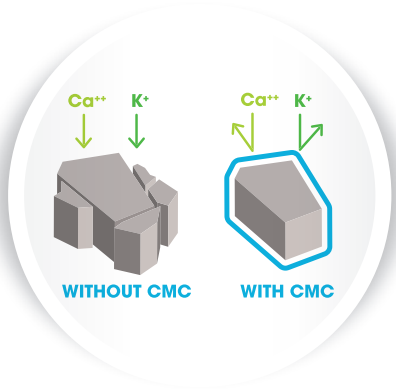


CELLULOSE GUM

In 2009 cellulose gum (carboxymethylcellulose or CMC) was approved by the European Community as an alternative to traditional treatments using electrodialysis or cold, used for tartrate stabilisation of wines. This cellulose derivative, extracted only from wood for oenology (to avoid any risk of contaminating products by a GMO source from cotton) and sustainably-managed forests, has been used for several decades in a large number of food preparations (E468). It has the advantage of being totally organoleptically neutral and extremely effective for stabilising wines against potassium bitartrate.

Its action has been known to be effective for at least 4 years.

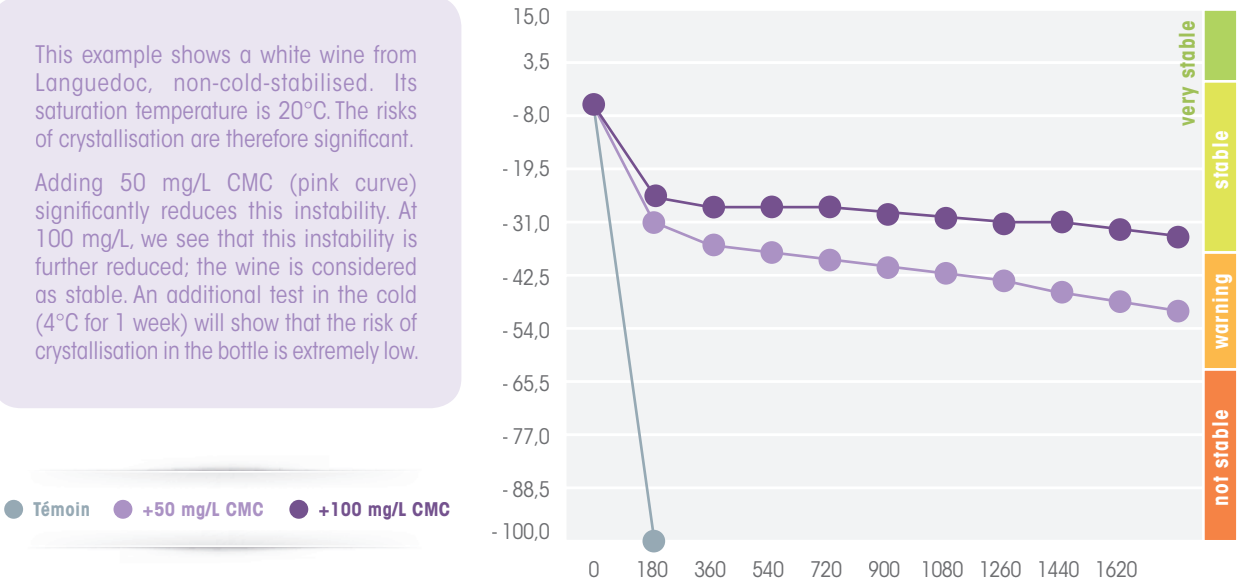




Very soluble in wine, CMC has the special feature of being able to interfere with microcrystals as they form. It prevents them growing and they do not therefore become visible. In this way wines are stabilised against tartrate precipitation.

This example shows a white wine from Languedoc, non-cold-stabilised. Its saturation temperature is 20°C. The risks of crystallisation are therefore significant.

Adding 50 mg/L CMC (pink curve) significantly reduces this instability. At 100 mg/L, we see that this instability is further reduced; the wine is considered as stable. An additional test in the cold (4°C for 1 week) will show that the risk of crystallisation in the bottle is extremely low.



Preliminary tests are recommended to determine the appropriate dose to use and to avoid any colloidal instability.

INOSTAB G

1 kg | 5 kg

Highly purified cellulose gum supplied in granules for better solubilisation.
It is used to delay crystallisation of tartrate salts in wines.

INOSTAB MES

1 L | 5 L | 10 L | 21 kg | 1 000 L

Cellulose gum is also available in solution for ease of use.

CORRECTORS

ORGANOLEPTIC CORRECTORS

CARBONS

INOBENT N10

MES | 20 L | 1 000 L

FOR HEAVILY-STAINED WHITE MUSTS AND WINES.

INOBENT N10 is an activated plant-based black suitable for decolourising stained white musts and wines, and bentonite with high sedimenting capacity.

It contains :
→ A bentonite with a good capacity to take up colloids while avoiding adsorption of soluble macromolecules responsible for body and the quality of the bubbles for sparkling wines.
→ A carbon specially selected for its ability to preserve the organoleptic properties of the must or the wine

Wines treated with INOBENT N10 are considered more upright, stronger and more elegant.

Products subject to approval. Comply with current legislation in your wine-growing region.

OTACLEAN

1 kg

TO FIGHT AGAINST OTA.

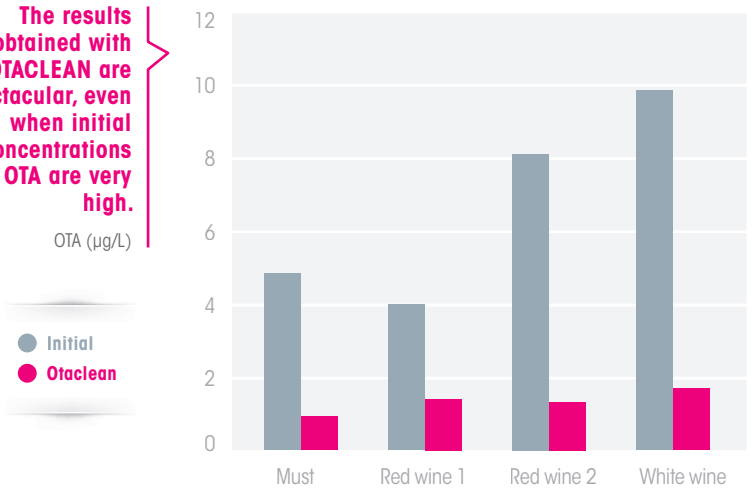
OTACLEAN is an activated plant-based carbon, specially selected for its excellent adsorptive properties for Ochratoxin A. It works without stripping the wine and by preserving the organoleptic properties of the must or wine. OTACLEAN has been specially selected not to contribute ethereal and solvent notes normally associated with carbon treatments.
It also corrects taste defects while preserving the aromas of wines.
It also has the advantage of being weakly decolourising.

Products subject to approval. Comply with current legislation in your wine-growing region.

Example of a must treatment

	OTA (µg/L)
Initial must	4,80
Conc. formul. A	1,95
Conc. formul. B	1,15
OTACLEAN	0,90
OTACLEAN + Vitistart	0,81

The results obtained with OTACLEAN are spectacular, even when initial concentrations of OTA are very high.



FLAVOCLEAN

1 kg

TO FIGHT AGAINST BAD TASTES.

Activated plant-based black, suitable for deodorising musts and wines, particularly active against certain tastes : musty and plant-like (IPMP, etc.). It is inert activated carbon with high adsorptive capacity for certain wine defects. It has relatively weak decolourising capacity

Products subject to approval. Comply with current legislation in your wine-growing region.

CARBION

POWDER 1 kg 5 kg GRANULES 1 kg 15 kg LIQUID 10 L

CARBION carbon is an activated plant-based black suitable for deodorising stained white musts and wines. It has been specially designed to avoid affecting the bouquet of wines.
CARBION is also available in granules to limit dust emissions and as a liquid for immediate use.

Products subject to approval. Comply with current legislation in your wine-growing region.

CARBION ENO

1 kg

CARBION ENO carbon is an activated plant-based black with very high deodorising capacity, suitable for heavilystained white musts and wines.
It selectively reduces the colour of wines while maintaining sensory qualities.
It also eliminates excess yellow-orange hues due to oxidation, so improving visual appearance.
It can be used in flotation.

Products subject to approval. Comply with current legislation in your wine-growing region.

OPPOSING REDUCTION

Reductive notes are a recurrent problem in oenology and are often difficult to eliminate. They are often described in these terms : rotten egg, cabbage, rubber, alliaceous odours, etc. To help combat these reductive notes, we offer two ready-to-use biological preparations: NETAROM and NETAROM Extra.

NETAROM

1 kg

TO ELIMINATE SLIGHT REDUCTIVE NOTES.

Compounds partly responsible for 'rotten egg' reductive notes have the general formula : R-SH.

NETAROM is a preparation based on inactivated yeasts used to decrease reductive notes by means of 2 mechanisms :
→ Copper in the wine is captured by NETAROM and malodorous R-SH thiols are attached to it and sediment. This will all be removed during decanting.
→ To a lesser extent, R-SH compounds are bound by the sulphurous groups in NETAROM by direct oxidation.

In this way, brief contact with NETAROM adsorbs the various sulphurous substances responsible for reductive changes while contributing to roundness and body.

WORDS FROM EXPERTS

Mixing both NETAROM products can give better results than using one product or the other on its own.

NETAROM EXTRA

1 kg 5 kg

TO ELIMINATE INTENSE REDUCTIVE AROMAS.

NETAROM EXTRA is used for intense reduction. NETAROM EXTRA has the advantage of being active on wines with significant reductive faults and where NETAROM could be less effective. It also has the advantage of contributing to roundness and body of wines, while preserving the sensory characteristics, unlike using copper, which dries and contributes a metallic sensation in the finish.

SOLUTION 700

250 mL | 1 L | 10 L

Solution based on copper sulphate, citric acid and sulphur dioxide.
SOLUTION 700 is used to prevent and treat reductive notes.

Comply with current legislation in your wine-growing region.

REDOXYL

1 L | 5 L

Very concentrated solution of copper sulphate, citric acid and SO2. REDOXYL prevents and treats reductive notes.

REDUCIT

1 L | 5 L

Preparation of copper citrate and citric acid. ReduCIT is an oenological solution for preventing and treating reductive notes.
ReduCIT can be used in both still wines and base wines for sparkling wines as well as disgorging.

ACIDITY CORRECTORS

ACIDIFIERS

D,L MALIC ACID

5 kg | 25 kg

Strong diacid MALIC ACID is a natural component of must and wine.
It increases the titration acidity and actual acidity.
It can also be used to manage the malolactic fermentation.

L+ TARTARIC ACID

1 kg | 5 kg | 25 kg

Strong diacid L+ TARTARIC ACID is a natural component of must and wine.
It increases the titration acidity and actual acidity.

CITRIC ACID

1 kg | 5 kg | 25 kg

CITRIC ACID is used to prevent ferric hazes. It is capable of complexing iron. Added to a wine containing a few milligrams of iron per litre, it will combine with the iron to create a soluble complex.
Its acidifying action is weak by reference to pH but markedly more perceptible from a taste viewpoint.

OENO LACTIC ACID

1 L | 5 L | 10 L | 25 kg

LACTIC ACID is a monoacid used to increase the titration acidity while having very little effect on pH.

	ACIDIFICATION		
Increase in the total acidity of wine, expressed in meq/L	13	20	33
Increase in the total acidity of wine, expressed in meq/L of H_2SO_4	0,67	1,00	1,65
Tartaric acid g/hl	100	150	250
D, L Malic acid g/hl	90	130	220
Lactic acid g/hl	120	180 (170 mL)	300 (280 mL)

Acidification is subject to regulations; please refer to the current legislation in your wine-growing region.

DE-ACIDIFIERS

De-acidifiers can be used on difficult vintages with incomplete maturity, when the musts and wines have very high levels of acidity.

They are also frequently used in the fabrication process by the traditional method, during reactivation and starter phases to initiate malolactic fermentation.

Two types of de-acidification are possible :
→ De-acidification by precipitation of insoluble tartaric acid salts,
→ De-acidification of malate and tartrate salts.

De-acidification is subject to regulations; please refer to the current legislation in your wine-growing region.

POTASSIUM BICARBONATE

1 kg | 25 kg

De-acidification using POTASSIUM BICARBONATE is explained by two phenomena :
→ The formation of insoluble salts with tartaric acid in the form of KTH,
→ The potassium super-saturation phenomenon.

In theory, adding 1 g/L of POTASSIUM BICARBONATE reduce the acidity by 0.49 g/L of H_2SO_4. However, under the effect of pH and other salt precipitations, there is quite another reality. Thus, in practice you have to add 140 g/hL to de-acidify wine at 1 g/L expressed as sulphuric acid.

CALCIUM CARBONATE

1 kg | 5 kg | 25 kg

CALCIUM CARBONATE is used to de-acidify musts and wines. It causes precipitation of tartaric acid as an insoluble salt, calcium tartrate. In practice you have to add 50 g/hL of CALCIUM CARBONATE to de-acidify wine at 0.5 g/L expressed as sulphuric acid.

OTHER CORRECTORS

ACIDE ASCORBIQUE

1 kg | 25 kg

ASCORBIC ACID is a powerful anti-oxidant.
It is used on the harvest as protection against oxidation. It is added to the harvest to complement the action of SO_2.

In white and rosé wines, ASCORBIC ACID is used to avoid tanning of phenolic compounds by preferentially fixing dissolved oxygen. This also preserves the wine's sensory characteristics.
In red wines, ASCORBIC ACID prevents premature ageing.

ASCORBIC ACID is involved in preventing 'oxidative shock' suffered by sparkling wines vinified using the traditional method, during disgorging, because it is very effective against controlled but sudden oxidation.
It is also used during bottling of still wines.
It also combats ferric haze. In this way it prevents oxidation of iron in its 'iron oxide' form, which is a cause of cloudiness.

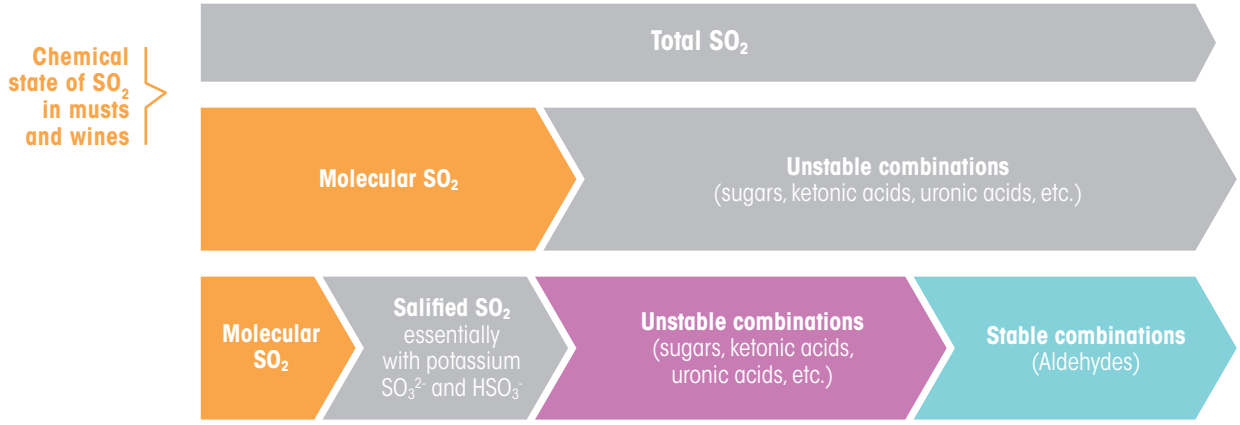
Qi TRAPPING

1 kg

TRAPS EXCESSIVE IRON AND COPPER

Qi TRAPPING is the natural "magnet" for combatting metals and eliminating unwanted metallic elements in wines.
An innovation formulation which significantly reduces iron and other heavy metal contents in wines. 100% natural, Qi TRAPPING contains no synthetic product or products of animal origin.
Iron and copper are the two main catalysers in the oxidation of wines. These two elements may also be the cause of cloudiness followed by unwanted haze. European regulations limit copper content in wines to 1 mg/L. Iron content of less than 10 mg/L is strongly recommended to avoid any risk or iron haze.

SULPHUROUS PRODUCTS



The protective effect of SO_2

→ Anti-oxidative role

Oxidation caused by laccase or tyrosinase enzymes is an extremely rapid phenomenon.

SO_2 completely inhibits the action of tyrosinase and partially inhibits laccase, particularly in botrytised musts. Polyphenoloxidase is completely inactivated in the presence of SO_2, so preventing the colour tanning.

→ Anti-oxygen role

SO_2 reacts with gaseous or dissolved oxygen to be oxidised to sulphates. The reaction requires the presence of catalysts such as copper and iron. In this way, aromatic compounds, anthocyanins, tannins and other delicate compounds are effectively protected by the presence of SO_2.

→ Antiseptic effect

SO_2 has a toxic action against micro-organisms. Note that bacteria are more sensitive to the action of SO_2 than yeasts.

AMMONIUM BISULPHITE 150 g/L

1 L | 5 L | 10 L | 1 000 L

Solution of 150 g/L SO_2 used during harvesting on must.
It can be used in the must receiving tank (as an antiseptic) or at vatting, during pressing for its anti-oxidant, antioxygen and antiseptic action.

POTASSIUM BISULPHITE 150 g/L

1 L | 5 L | 10 L

Solution of 150 g/L SO_2 used under various circumstances.
It can be used on musts for the same reasons as ammonium bisulphite, but also on clear wines :
→ To stop development of lactic acid bacteria,
→ To ensure the wine is well protected against microbial attacks after the malolactic fermentation,
→ After bubble-forming by means of the transport liquor, it preserves the wine from premature oxidation.

SULFIVIN A50, A80, A100, A150, A180, A200, A400

Solutions of ammonium bisulphite titrating respectively at 50, 80, 100, 150, 180, 200 and 400 g/L SO_2.

SULFIVIN K50, K80, K100, K150, K180

Solutions of potassium bisulphite titrating respectively at 50, 80, 100, 150 and 180 g/L de SO_2.

POTASSIUM METABISULPHITE

1 kg | 25 kg

It is used on fresh harvests (harvesting machine, press), on musts and wines. It contains 52 to 55% of its weight in SO_2.

INODOSE 2

48 tablets in a box

INODOSE 5

48 tablets in a box

Effervescent tablets prepared on a base of potassium metabisulphite. They release 2 g or 5 g of SO_2 per tablet into musts, wines or liqueurs. They simplify the sulphiting operation, particularly for wines matured under wood, and allow gradual uniform release of the required dose of SO_2.

INODOSE GRANULES

PRE-DOSES BAGS | 50 g | 100 g | 400 g releases

They come in the form of small, white, solid, odourless granules (1 to 2 mm). They release a precise dose of simplifying the sulphiting operation.
They are used for sulphiting trucks and musts coming out of the press, when stabilising wines at the end of fermentation or when readjusting SO_2.

The granulated formula has appreciable advantages :
→ Easy to disperse : granules mixed in easily,
→ Better protection of musts and wines: effervescent granules providing good distribution of SO_2,
→ Easy to use : release a precise dose of SO_2.

WORDS FROM USERS

To test it
is to adopt it !!!!!

SULFI-TAGE K60

1 L | 5 L | 10 L

Solution of potassium bisulphite titrated at 60 g/L de SO_2.

SULFI-BONDE

1 L | 5 L | 10 L

Solution of potassium bisulphite titrated at 100 g/L SO_2 specially for antiseptic bungholes.

SULFI-DEGORGEMENT

1 L | 5 L | 10 L

Solution based on potassium bisulphite, specially designed for disgorging, titrated at 180 g/L SO_2.

SULFITAMINE C

250 mL | 500 mL | 1 L

Solution based on ascorbic acid and sulphurous solution.
SULFITAMINE C has strong reducing power.
It prevents enzymatic and non-enzymatic oxidation of wine.
Overall, it improves the taste qualities of the wine by giving it freshness and fruitiness.

COMPLEX FORMULATIONS

CASSIT

1 L | 10 L

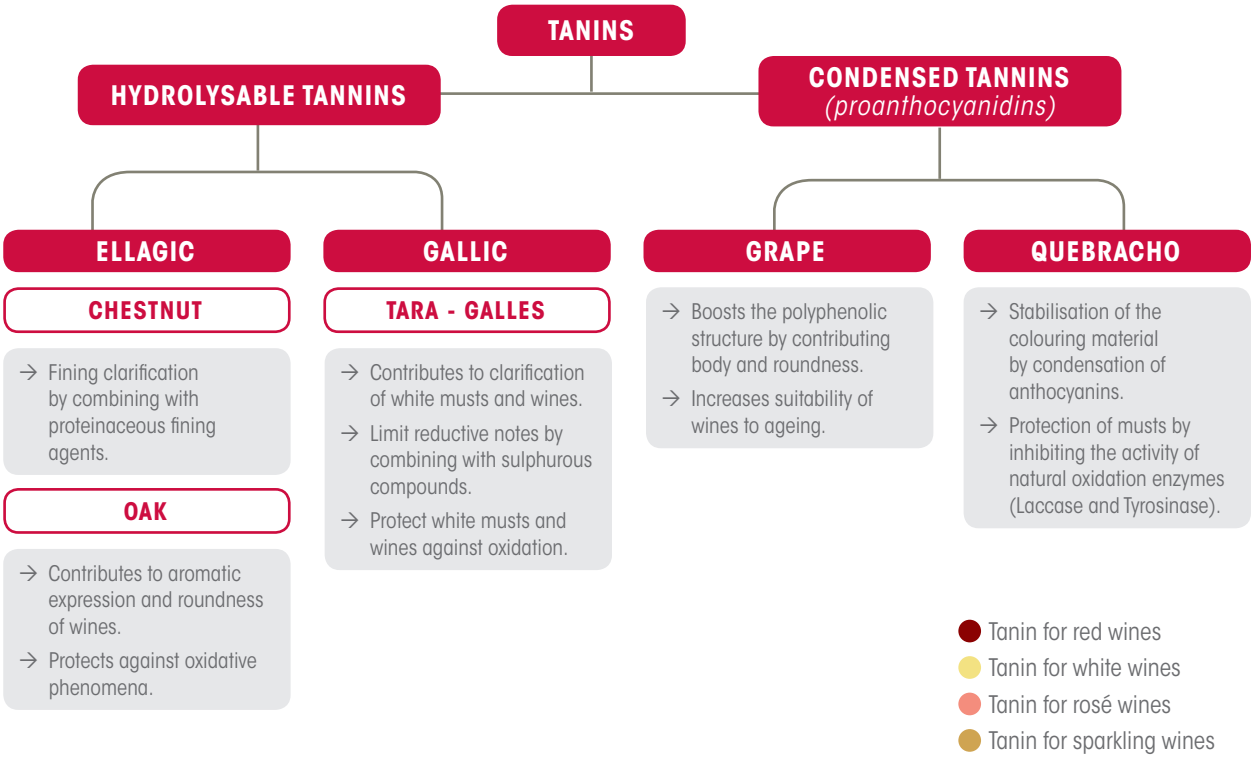
Mixture of citric acid and potassium bisulphite, it is used at disgorging and when dosing sparkling wines with sensitive development characters and/or slightly too much iron. This product is suitable for young wines that have a certain solidity or are too short.

SULFI-TANIN

1 L | 5 L | 10 L

Solution of ammonium bisulphite at 100 g/L pure SO_2 and Tara tannin. The presence of tannin adds to the antiseptic and anti-oxidant actions. SULFITANIN is used essentially when sulphiting musts.

TANINS



TANNINS FOR VINIFICATION

MANN BOUQUET B19 (MANNOPROTEINS, GLUTATHIONE & TANNINS)

1 kg

FOR ROUNDNESS & AROMATIC BOUQUET REVELATION, AGAINST OXYDATION.

MANN BOUQUET B19 is a formulation based on inactivated yeast, specifically selected for their high rate in mannoproteins and glutathione, condensed tannins extracted from specific wood species. It is designed to protect white must against oxidation and for aromatic bouquet revelation.
It preserves wine aromas and protects musts against oxidation thanks to glutathione properties.
It brings roundness, sweetness and volume through interaction of mannoproteins with the wine matrix.
It contributes into strengthening floral and white fruity notes during wine fermentation.

MANN BOUQUET R16 (MANNOPROTEINS & TANNINS)

1 KG

FOR ROUNDNESS, AROMATIC BOUQUET REVELATION, COLOUR STABILISATION.

MANN BOUQUET R16 is a formulation based on inactivated yeast, specifically selected for their high rate in mannoproteins, ellagic tannins extracted from various wood species, and condensed tanins extracted from grapes. It is designed for the revelation of aromatic bouquet in red and rosé wines.
It stabilizes the colour through interaction of condensed tannins with anthocyanins.
It brings roundness, sweetness and volume through interaction of mannoproteins with the wine matrix.
It contributes into reinforcing fruity and spicy notes in the wine during fermentation.

TANIN BOUQUET R36 (ELLAGIC & CONDENSED)

1 KG

FOR FRUIT AROMATIC REVELATION AND COLOUR STABILISATION.

TANIN BOUQUET R36 is a blend of selected tannins extracted from various wood species. These raw materials have been chosen for their ability on colour stabilization, and red wines aromatic bouquet revelation.
It improves aromatic intensity of red and rosé wines during fermentation
It reveals red fruits aromas and diminish potential vegetal imperfections in the wines
It stabilizes the colour through interaction of condensed tannins with anthocyanins.

TANIN CRISTALLIN (GALLIC TANNIN)

1 kg | 5 kg | 12,5 kg

FOR BETTER PRESERVATION.

TANIN CRISTALLIN is a formulation that gives finesse and structure to white wines without adding astringency.
It protects musts from natural oxidation by inhibiting laccase and tyrosinase activity.
It eliminates protein hazes by precipitating unstable proteins when settling musts.
It boosts the anti-oxidant power of SO2 and adds to its antiseptic effect. It is formulated as granules for ease of use

TANIN SR (100% PROANTHOCYANIDIN)

1 kg | 5 kg

TO MAINTAIN COLOURING MATERIALS.

TANIN SR is a formulation of 100% proanthocyanidin tannin, intended to stabilise colour.
It sustainably stabilises colouring material by forming covalent bonds with anthocyanins, but also by copigmentation phenomena.
It protects musts by inhibiting the activity of natural oxidation enzymes (Laccase and Tyrosinase).

TANIN SR TERROIR (PROANTHOCYANIDIN AND HYDROLYSABLE)

1 kg | 5 kg | 25 kg

TO MAINTAIN COLOURING MATERIAL AND IMPROVE STRUCTURE.

TANIN SR TERROIR is specifically formulated to combine the effects of proanthocyanidin tannins (grapes and quebracho) and hydrolysable tannins without adding bitterness.
It sustainably stabilises colouring material by forming covalent bonds with anthocyanins.
It improves the structure of wines by acting on the body.

SOLUTION SR TERROIR (PROANTHOCYANIDIN AND HYDROLYSABLE)

1 L | 5 L

SOLUTION SR TERROIR is a formulation combining the effects of proanthocyanidin and hydrolysable tannins, as well as copper sulphate.
It stabilises colour and contributes intensity and structure to wines.

VOLUTAN (100% GRAPE)

PROPOSAL OF SERVICE TO PUT INTO SOLUTION AT 400 g/L

500 mL | 1 L | 5 L

TO MAINTAIN COLOURING MATERIAL WHILE CONTRIBUTING STRUCTURE, BODY AND SUPPLENESS.

VOLUTAN is specifically selected to maintain colouring material while contributing structure, body and suppleness to musts and wines with a polyphenol deficiency.
It sustainably stabilises colouring material by forming Tannin-Anthocyanin combinations.
It compensates the imbalance of natural tannins from grapes while contributing body and suppleness.

TANNINS FOR FINING

TANIN TC (ELLAGIC TANNIN EXTRACTED FROM THE CHESTNUT)

1 kg | 25 kg

TO FACILITATE FINING.

TANIN TC has been selected for its efficacy forming protein tannin complexes while playing an anti-oxidant role.
The tannin forming the complex with the fining agent leads to settling of particles making the wine cloudy.
It enhances the anti-oxidant power of SO_2.

TANNINS FOR ELEVAGE

EXGRAPE PEL (100 % GRAPE SKIN)

1 kg | 25 kg

FOR MORE HARMONIOUS WINES WHILE ALSO IMPROVING SUITABILITY FOR AGEING.

EXGRAPE PEL, derived from the skin of white grapes, is selected to improve the taste perception as well as the balance of wines.
It compensates for polyphenol deficiency of wine by refining the structure while contributing roundness.
It increases the suitability of wines for ageing by protecting them against oxidative phenomena.

SOLUTION SR TERROIR (PROANTHOCYANIDIN AND HYDROLYSABLE)

1 L | 5 L

SOLUTION SR TERROIR is a formulation combining the effects of proanthocyanidin and hydrolysable tannins, as well as copper sulphate.
It stabilises colour and contributes intensity and structure to wines.

TANIFASE ELEV (OAK)

1 kg

TO HIGHLIGHT THE AROMATIC EXPRESSION AND ROUNDNESS OF WINES WHILE PROTECTING THEM AGAINST OXIDATIVE PHENOMENA.

TANIFASE ELEVAGE is a high quality oak tannin.
It improves elegance, structure, length and aromatic expression of wines.
It regulates oxido-reductive phenomena during elevage in casks or during micro-oxygenation.

TANIN SR TERROIR (PROANTHOCYANIDIN AND HYDROLYSABLE)

1 kg | 5 kg | 25 kg

FOR YOUNG RED WINES OR THOSE FOR LAYING DOWN WITH A STRUCTURAL DEFICIENCY.

TANIN SR TERROIR is specifically formulated to combine the effects of proanthocyanidin (grapes and quebracho) and hydrolysable tannins without adding bitterness.
It improves the structure of wines by acting on the body. It compensates for polyphenol deficiency of wine by contributing balance, structure and roundness.
It increases the suitability of wines for ageing by protecting them against oxidative phenomena.

VOLUTAN (100% GRAPE: SKIN AND SEED)

PROPOSAL OF SERVICE TO PUT INTO SOLUTION AT 400 g/L | 500 mL | 1 L | 5 L

FOR MORE HARMONIOUS WINES WHILE ALSO IMPROVING SUITABILITY FOR AGEING.

VOLUTAN is a tannin derived only from grapes.
It compensates for polyphenol deficiency of wine by contributing balance, structure and roundness.
It increases the suitability of wines for ageing by protecting them against oxidative phenomena.

WORDS FROM USERS

'EXCELLENT product that rounds wines by giving sweetness and body and bringing out aromas'.

FINISHING TANNINS

PRIVILÈGE BLEU (AMERICAN OAK, ELLAGIC)

250 g

FOR STRUCTURE & AROMATIC INTENSITY, AGAINST OXYDATION.

PRIVILÈGE BLEU is a blend of ellagic tannins extracted from rigorously selected American oak tree (Quercus alba). It is designed for pre-bottling stage.
It enhances the structure and the body of white, red and rosés wines.
It contributes into reinforcing aromatic intensity of the wine, revealing coco, chocolate, coffee notes.

PRIVILÈGE NOIR (FRENCH OAK, ELLAGIC)

250 g

FOR STRUCTURE & AROMATIC FINESSE, AGAINST OXYDATION.

PRIVILÈGE NOIR is a blend of ellagic tannins extracted from rigorously selected French pedunculate oak tree (Quercus robur). It is designed for pre-bottling stage.
It enhances the structure and the body of red and rosés wines
It contributes into reinforcing the fullness and organoleptic balance of the wine, thus revealing notes of red and ripe fruits.

ESSENTIAL OAK PROGRESS (ELLAGIC & PROANTHOCYANIDIC)

500 g

FOR BALANCE, COMPLEXITY & AROMATIC PERSISTANCE.

ESSENTIAL OAK PROGRESS is a blend of fining tannins, formulated with ellagic tannins and condensed tannins extracted from selected wood varieties.
It enhances the structure and aromatic complexity of white, red and rosés wines.
It improves aromatic persistence and length in the mouth, while bringing sweetness to the wine.

ESSENTIAL OAK SWEET (OAK, ELLAGIC)

500 g

FOR SWEETNESS, BALANCE & AROMATIC INTENSITY.

ESSENTIAL OAK SWEET is a blend of finishing tannins, formulated with ellagic tannins extracted from selected wood varieties.
It improves the balance and the structure while bringing sweetness to white, red and rosés wines.
It strengthens aromatic intensity, enhancing honey and coco notes.

ESSENTIAL OAK STRONG (OAK, ELLAGIC)

500 g

FOR STRUCTURE, AROMATIC COMPLEXITY & LENGTH IN THE MOUTH.

ESSENTIAL OAK STRONG is a blend of finishing tannins, formulated with ellagic tannins extracted from selected wood varieties.
It contributes into improving the structure and length in the mouth of white, red and rosés wines.
It reveals complexity and increases the aromatic intensity of wines, on liquorice and tobacco notes.

ESSENTIAL PASSION (PROANTHOCYANIDIC)

500 g

FOR SWEETNESS, AROMATIC INTENSITY & VARIETAL AROMAS REVELATION.

ESSENTIAL PASSION is a tannin designed for red and rosé wines fining stage; formulated from condensed tannins extracted from wood.
It contributes into reinforcing the global aromatic intensity of red and rosés wines.
It brings sweetness and enhances the aromatic amplitude of wines, revealing varietal fruity aromas.

TANNINS FOR SPARKLING WINES

TANIN CRISTALLIN (GALLIC TANNIN)

1 kg | 5 kg | 12,5 kg

FOR BETTER PRESERVATION.

TANIN CRISTALLIN is a formulation that gives finesse and structure to white wines without adding astringency.
It protects musts from natural oxidation: inhibition of laccase and tyrosinase activity.
It prevents protein hazes by precipitating unstable proteins when settling musts.
It boosts the anti-oxidant power of SO_2 and adds to its antiseptic effect.

INOTAN B (QUEBRACHO)

1 kg | 5 kg | 1 L | 5 L | 10 L

TO IMPROVE STRUCTURE.

Using proanthocyanidin tannin restricts the addition of SO_2 and above all gives structure to white and rosé wines.
It contributes to wines ageing well.
It is used to richer and more generous wines.

SOLUTION TC (ELLAGIC TANNIN EXTRACTED FROM THE CHESTNUT)

1 L | 5 L | 10 L

TO FACILITATE FINING.

In red wines, there are sufficient quantities of tannins to react with protein fining agents (gelatines, albumin and fish finings). In white wines, adding a formulation of ellagic tannins optimises fining by promoting the interaction with the fining agent and avoids over-fining. Chestnut tannins are particularly suitable for this application; they enable good flocculation with proteins. A precipitate follows, which as it sediments brings with it the particles causing cloudiness in the wine.
In this way cloudiness is markedly improved, wines are stabilised and their polyphenolic structure is refined.
SOLUTION TC is made up form hydrolysable tannic acid (extracted from chestnut) and silica gel, which keeps the tannin in suspension and improves clarification of the wine.

SOLUTION ST (GALLIC TANNIN)

1 L | 5 L | 10 L

SPECIALLY DESIGNED FOR TIRAGE.

Solution ST is gallic tannin extract particularly well suited to white wines.
Added at tirage, it gives more structure to wines.
The presence of copper sulphate prevents reductive notes appearing.

TANIN CAS (OAK)

PROPOSAL OF SERVICE TO PUT INTO SOLUTION | 1 L

SPECIFICALLY FORMULATED FOR TRANSPORT LIQUOR.

This high-quality oak tannin is used by addition to the transport liquor in order to improve the texture and sensory perception of wines.
It brings out aromas while also improving the general balance and structure of wines.

WOOD IN ŒNOLOGY

ENOQUER RANGE

The ENOQUER range is made from cask-quality cooperage oak wood guaranteed, without sapwood or bark. Our woods are rigorously selected from sessile oak varieties (Quercus sessiliflora) or pedunculate oak (Quercus robur) from French forests and using Quercus alba for American wood.

Before conversion, the wood is dried and matured for a minimum of 24 months in the open air.

The oak product is available in Wood sourced from :
→ FRANCE,
→ USA.

During the alcoholic fermentation, fresh wood improves the tannic structure and stabilises the colour of red wines.The wine has more body and sweetness emphasised by almond and dried fruit notes.

Gentle charring will be preferred during the alcoholic fermentation to improve body, sweetness and aromatic complexity (fruity nose).

Moderate and stronger charring will be preferred during elevage to increase the aromatic complexity of wines.

A mixture of these chars will come close to the best of elevage in casks.

POWDER

MEDIUM HEATING - UNCHARRED

BAG 10 kg

Banned for use in EU.

GRANULES

MEDIUM HEATING - UNCHARRED

BAG 10 kg

FLAKES

LIGHT HEATING - MEDIUM - MEDIUM + STRONG - UNCHARRED

INFUSION NET 10 kg

STAVES

LIGHT HEATING - MEDIUM - MEDIUM + STRONG - UNCHARRED

50 u/LDPE bag

RCM

SUCRAISIN ENRICHMENT RCM

10 L | 20 L | 60 L | 1 000 L

Rectified Concentrated Must (RCM) is made from grape juice with all 'non-sugar' components removed. It is perfectly neutral. It preserves the organoleptic qualities of the base wine and causes no differences in terms of taste compared to traditional chaptalisation with dry sugar. SUCRAISIN is simple to use; in liquid form, it can be pumped and mixes instantaneously.

The reliable, simple and effective solution for enriching musts :

→ Delivery by tanker,
→ Unloaded by pumping,
→ Tank storage,
→ Added by pumping while pumping over,
→ Mixes rapidly in the tank,
→ Saves time, labour and energy, because it does not have to be melted.

SUCRAISIN LIQUOR RCM

1 000 L

Legislation authorises rectified concentrated must for adding sugar when making tirage or transport liquors.
Using SUCRAISIN enables the blend (sugar + wine + yeast + turning adjuvants) to be prepared rapidly and uniformly. RCM composed only of fructose and glucose can be used rapidly by yeasts.

Advantages of Sucraisin

→ saves time, labour and energy, because it does not have to be melted,
→ liquor very uniform from one disgorgement to another; using RCM eliminates problems associated with storing conventional liquors,
→ RCM preserves the qualities of the disgorged wine and contributes only the sugar component,
→ practical to handle,
→ product not requiring additional filtration,
→ impurity-free product of known concentration,
→ can be dosed near to transport by very rapid combination with the disgorged wine.

SUCRAISIN for making tirage or transport liquors is also available in ORGANIC form.

NOTES

IOC

Révélons votre différence

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