

CATALOGUE - 2026 EDITION



LAMOTHE-ABIET

Solutions for winemaking

A vertical white thermometer graphic is positioned behind the word 'CELSIUS'. The thermometer has a bulb at the bottom and a scale with horizontal lines. The background of the cover features a bright sky with white clouds and a sunburst effect, transitioning into a vineyard with rows of grapevines in the foreground.

CELSIUS

🍷 LESS ALCOHOL



Climate change has a significant influence on wines' flavour profile, requiring innovative approaches to preserve the desired freshness and balance.

In light of this, we are pleased to introduce you to our new yeast **Excellence® Celsius**, the result of several years of research. It plays a role as an alternative to help face the challenges from climate change.

Excellence® Celsius is a *Saccharomyces cerevisiae* selected for its capacity to decrease the alcohol content and conserve wines' acidity.

At Lamothe-Abiet, innovation, close contact with our clients, and the expertise of our R&D department guarantee effective technical tools adapted to the current trends.

In this catalogue, you will find all of our enological solutions and decision-making tools which help to respect wines.

Guillaume MARTINEAU
General Manager



In 2025,

Lamothe-Abiet joined the ECOTREE adventure and participates in the restoration of 10 ha of burnt forest in the commune of Landiras by financing:



MORE THAN
500
MARITIME PINES

CONTENTS

◆ YEASTS	4
◆ BACTERIA	10
◆ NUTRIENTS	12
◆ ENZYMES	16
◆ TANNINS	18
◆ FINING	22
◆ STABILISATION	26
◆ SPARKLING WINES	30
◆ CENOBOIS®	32
◆ VEGAN CERTIFICATE	36
◆ AROMATIC OPTIMISATION	38
◆ SO ₂ LUTIONS - REDUCING THE USE OF SO ₂	40
◆ EXTRACTION AND STABILISATION OF COLOUR MATTER	42
◆ PROTOCOLS // SPARKLING WINES	43
◆ DECISION-MAKING TOOLS // FINING	48
◆ DECISION-MAKING TOOLS // AGEING TANNINS	49
◆ DECISION-MAKING TOOLS // STABILISATION	50



YEASTS

The high standards of the Excellence® yeast range are now widely recognised.

Our yeasts are very rigorously selected and developed at the Institut des Sciences de la Vigne et du Vin (ISVV) of Bordeaux by our R&D teams which have proven themselves, over time, to be the most talented in the field.



The Excellence® FTH, TXL, STR, CHD & Rosé strains are references for the production of aromatic white and rosé wines. These yeasts' specific capacities and their resilience to fermentation result in clean wines with intense aromatic profiles.

EXCELLENCE®

FTH

Fresh Thiols

- ◆ Revelation of volatile thiols
- ◆ Citrus notes, fresh aromatic profile
- ◆ Lively mouthfeel

Aromatic profile

EXCELLENCE®

TXL

Intense Thiols

- ◆ Revelation of volatile thiols
- ◆ Box-tree, citrus and tropical fruits
- ◆ Perfect balance: volume, complexity and aromatic finesse

Aromatic profile

EXCELLENCE®

STR

Esters

- ◆ Revelation of fermentary esters
- ◆ Stone fruit and tropical fruit notes
- ◆ Aromatic complexity

Aromatic profile

EXCELLENCE®

CHD

Sélection Bourgogne

- ◆ Revelation of chardonnay varietal aromas
- ◆ Aromatic intensity and complexity
- ◆ Balance of wines between volume and tension

Aromatic profile

EXCELLENCE®

Rosé

Pure Fruit

- ◆ Clean and precise profile (no aromatic masks)
- ◆ Aromatic intensity and freshness (white flowers, stone fruits)
- ◆ On the palate: vivacity, L-malic acid preserved

Aromatic profile

◆ Fresh fruit

◆ Tropical fruits

◆ Citrus fruits

◆ Floral



Excellence® XR, DS, SP & FR are specifically suited to the production of red wines. These yeasts can be used for various winemaking objectives, in order to obtain precise profiles whilst respecting varietal typicity and ensuring excellent fermentation dynamics.

EXCELLENCE®

XR

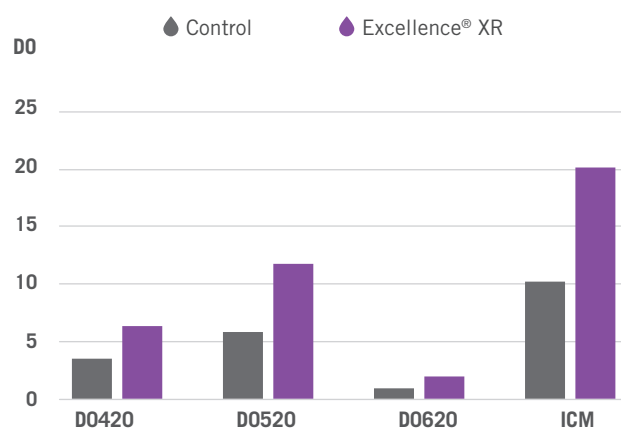
Grand rouge

- ◆ Powerful wines with structure and volume
- ◆ Ideal for carrying out MLF in co-inoculation
- ◆ High polysaccharide production: stabilisation of colour and volume increase
- ◆ Adapted to high potential alcohols, low production of volatile acidity

Aromatic profile

Static color stabilisation - post MLF analysis

Harvest 2019 • Cabernet Sauvignon • Adelaide Hills, Australia



EXCELLENCE®

DS

Prestige

- ◆ Fleshy profile, fresh fruit aromas
- ◆ Traditional vinification / thermovinification
- ◆ Adapted to high ABV, low volatile acidity production

Aromatic profile

EXCELLENCE®

SP

Spicy

- ◆ Structured profile, spice aromas
- ◆ Traditional vinification / thermovinification
- ◆ Ideal for fast rotation wines or for medium-length bottle ageing

Aromatic profile

EXCELLENCE®

FR

Red fruits

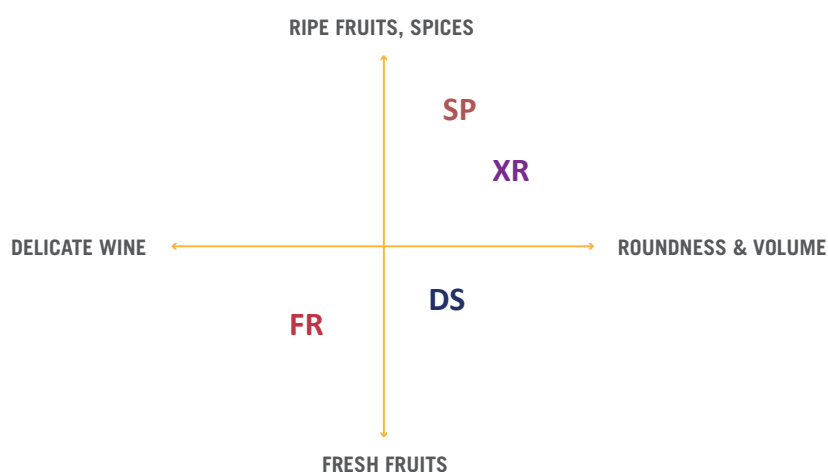
- ◆ Easy-drinking profile, red fruit aromas
- ◆ Recommended to ferment thermo-macerated grapes
- ◆ Fresh and balanced wines

Aromatic profile

◆ Structure, volume

◆ Fresh fruits

◆ Ripe fruits, spices



EXCELLENCE® ROSÉ

Its purity makes it shine



A strain of *Saccharomyces cerevisiae* selected using the Breeding technique to produce rosé wines with a **fresh** and **intense** aromatic profile.

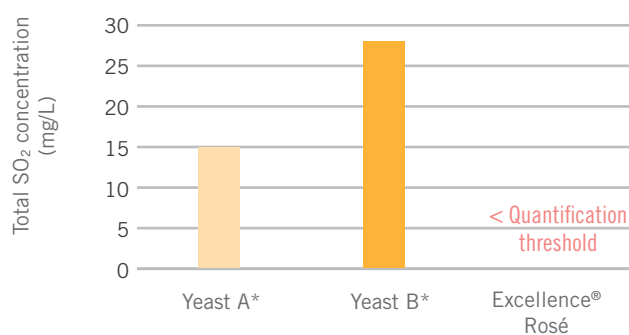
Benefiting from the latest knowledge in microbiology from our R&D teams, **Excellence® Rosé** is characterised by its **high consumption of SO₂** and its **low production of combining compounds** (ethanal and others). This specific feature

allows winemakers to reduce their sulfite rates whilst maximising their effectiveness and amplifying the revelation of a rich and **intense aromatic palette**.

Wines present an aromatic profile marked by notes of fresh fruits and **flowers**, reinforced by an **intense freshness** on the palate. With no marking compounds, the resulting **aromatic purity** gives wines a real sparkle.

Total SO₂ content after alcoholic fermentation

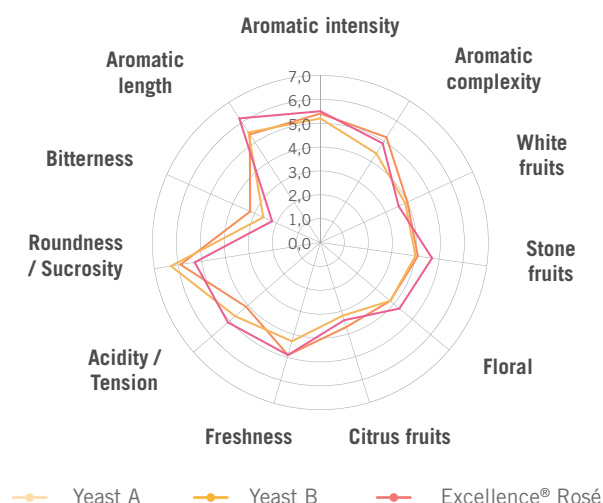
Grenache rosé • 2022 Must sulfited at 5 g/hL



*Yeasts of reference for aromatic rosé production

Blind tasting result (19 trained tasters) of rosé wines made with 3 different yeasts

Grenache rosé • 2022



EXCELLENCE® CHD

Sélection Bourgogne

Strain of *Saccharomyces cerevisiae* selected in Burgundy in partnership with the IFV (Institut Français du Vin et de la Vigne).

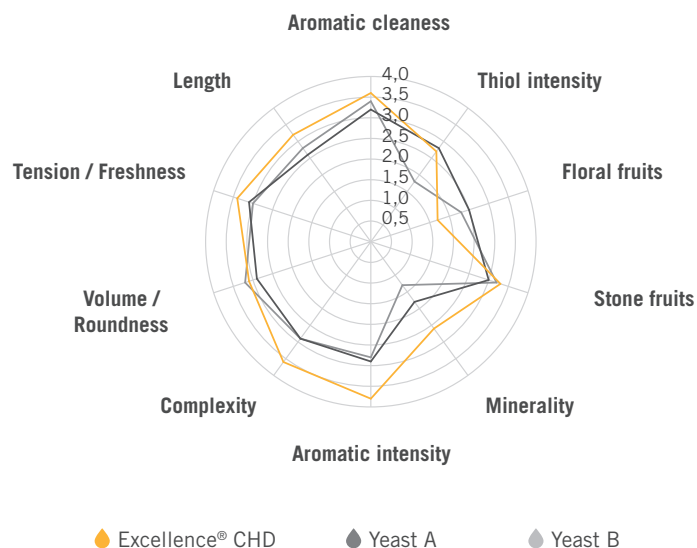
Specifically adapted to the requirements of Chardonnay winemaking, it helps to produce wines that fully reflect the **varietal typicity** of this iconic and ubiquitous variety.

Excellence® CHD helps to express an **intense aromatic complexity**, mixing aromas of fresh stone fruit with a beautiful minerality.

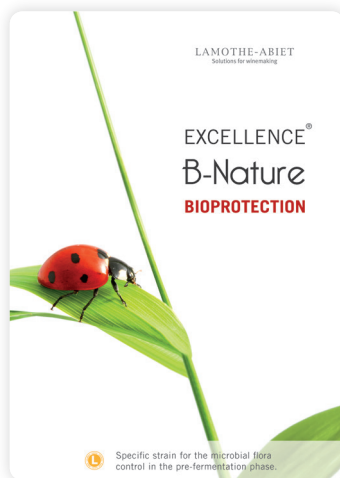
It produces wines that are characterised by a **great tension** and a notable increase in **volume** on the palate, ensuring the **organoleptic balance**.

Results of blind tasting of chardonnay wines made with 3 different yeasts.

Chardonnay 2020 • Beaune, Burgundy • TAV: 13,70 % vol. • pH = 3,36



Non-*Saccharomyces* yeasts have raised increasing interest in enology over the past few years. Overlooked for a long time, they now reveal the secrets of specific and useful metabolisms. Integrating these microorganisms into winemaking protocols can help to produce wines using a more modern approach.



EXCELLENCE® B-NATURE

Bioprotection

Through its research efforts, Lamothe-Abiet has selected Excellence® B-Nature, a strain from the species *Metschnikowia pulcherrima* (a non-*Saccharomyces* yeast).

BENEFITS

- ◆ Control of the microbiological flora from the harvest
- ◆ Increased aromatic complexity of the wine
- ◆ Decrease of the rate of SO₂ on the grapes
- ◆ Rapid consumption of dissolved oxygen in the must
- ◆ Reduction of the compounds that combine SO₂

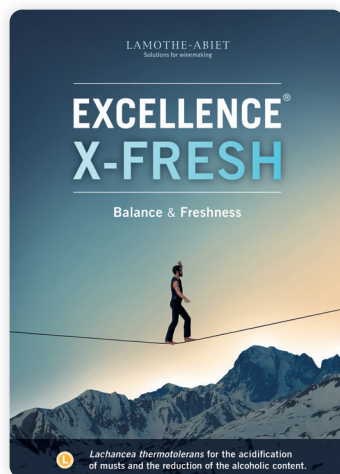
TO KNOW

Bioprotection involves operating an early control of the natural flora that is present on the grapes.

The flora's balance is extremely sensitive between the grapes' harvest and the yeast addition to the must. This represents a major risk of microbial spoilage (development of non-*Saccharomyces* yeast that are often the source of defaults, such as *Brettanomyces*,

bacteria...). As opposed to sulphite addition which destroys these microorganisms, biological control involves **inoculating a fermenting yeast to occupy the medium** and thus **avoid the growth of undesirable microorganisms**.

PROTOCOL:
SO₂ reduction



EXCELLENCE® X-FRESH

Balance and freshness

Strain of *Lachancea thermotolerans* (non-*Saccharomyces* yeast).

This yeast has a unique metabolism which enables it to transform fermentable sugars into **lactic acid** during the fermentation.

BENEFITS

This lactic acid production is directly linked to the following variations:

- ◆ Increased total acidity
- ◆ Lower pH
- ◆ Small decrease in alcohol content

Used in association with *Saccharomyces cerevisiae*, it restores **balance** and **freshness** to wines.



BENEFITS OF USING BIO-ACIDIFICATION:

- Produce lactic acid, a molecule that is stable in wine
- Natural alternative to avoid chemical inputs
- Increase the total acidity by generating a mild and integrated acidity
- Low-cost technique (cost per hectolitre cheaper than adding organic acids)

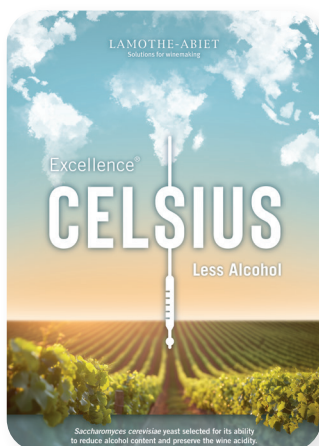


FIND THE TECHNICAL DATA ON OUR PRACTICAL BOOKLET, AVAILABLE ON OUR WEBSITE:



EXCELLENCE® CELSIUS

Less Alcohol



Using the latest advances in genetics applied to enology, Lamothe-Abiet has selected a new yeast, **Excellence® Celsius** (*Saccharomyces cerevisiae*), whose main characteristic is to **reduce the alcohol content** of the wines produced.

Selection through the Breeding technique has conferred Excellence® Celsius with QTL (Quantitative Trait Loci) that are specifically associated with decreased fermentary yield. Therefore its sugar consumption metabolism is oriented towards other products than ethanol (glycerol for example).

Furthermore, wines produced with Excellence® Celsius have **greater**

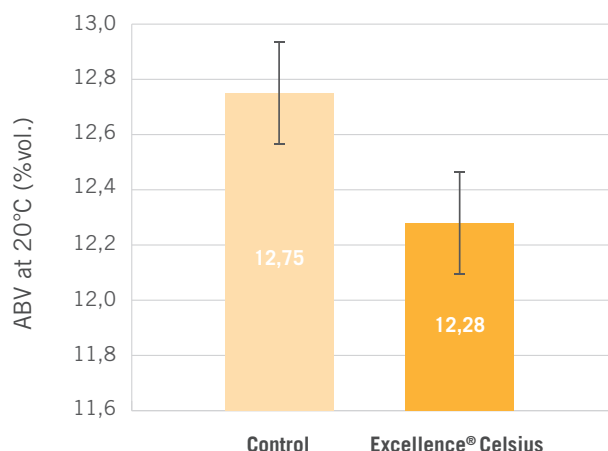
freshness, since it can **produce L-malic acid** during the alcoholic fermentation. This has a direct action in **increasing the total acidity** and **decreasing the pH**.

The resulting wines offer an **aromatic profile centered on fresh fruits** thanks to the production of fermentary esters. On the palate, this yeast gives wines with an **elegant tension** and good mouthfeel. Red, white and rosé wines are therefore **balanced** and **harmonious**.

These unique properties make Excellence® Celsius an **essential tool** for **managing wines' balance**, especially in the context of **climate evolution**.

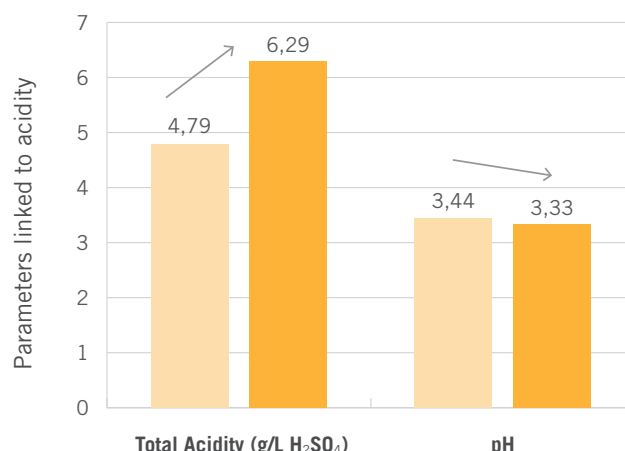
Alcohol by volume at 20°C measured after AF

Bordeaux • Merlot • 2023



Acidity management

Control Excellence® Celsius



EXCELLENCE® FINISHER

Don't stay stuck



Complicated vintages are more and more common, causing an increased number of stuck fermentations.

To meet this challenge, Lamothe-Abiet has developed **Excellence® Finisher**, the result of ten years of research, in order to offer a reliable and effective tool for restarting stuck alcoholic fermentations.

Excellence® Finisher is a strain of *Saccharomyces cerevisiae* produced using

the Breeding technique, aiming to obtain a reliable strain with strong fructophilic action for restarting stuck fermentations, even in difficult conditions.

Thanks to its resistance and its reliability in fermentation, **Excellence® Finisher** reduces the risks of organoleptic alterations.



LAMOTHE-ABIET YEASTS LIST

L.A. SOLUTIONS

	STRAIN	THIOLS	ESTERS	VARIETAL	ROUNDNESS	SWEET	NITROGEN NEEDS	ALCOHOL TOLERANCE	VARIETALS	
										
EXCELLENCE® YEASTS	CHD Burgundy Selection	•	•	•	•		Medium	15 %	chardonnay	
	 ROSÉ	•	•		•		Medium	14,5 %	sémillon, viognier	grenache, shiraz, cinsault, mourvèdre, merlot, cabernet franc, cabernet sauvignon
	FTH® Fresh thiols	•	•	•		•	Medium	15 %	sauvignon, riesling, gewurztraminer, vermentino	merlot, grenache, cinsault, cabernet franc, cabernet sauvignon, shiraz
	TXL® Intense thiols	•	•	•	•	•	Medium	15 %	chardonnay, sauvignon, gewurztraminer, grenache blanc, chenin blanc, riesling, vermentino, viognier, pinot gris	mourvèdre, grenache, cinsault, cabernet franc, cabernet sauvignon
	STR Esters	•	•		•		Medium	15 %	chenin, chardonnay, muscadet, viognier, muscadelle	grenache, cinsault, cabernet franc, shiraz, merlot
	FW Floral	•	•				High	14,5 %	chardonnay, sauvignon, chenin, muscat	
	E2F Sparkling	Production of wines with great aromatic finesse thanks to its resistance to alcohol and its fructophilic characteristics. Recommended for the second fermentation.					Low	17 %	chardonnay, chenin blanc, muscat, mauzac, ugni blanc, pinot gris	pinot noir, pinot meunier
L.A. YEASTS	 SPUMANTE	Highlights the aromatic floral (Terpens) and fruity (Esters) notes of the wine. Recommended for sparkling wines made from second fermentation in pressure tanks (Charmat method).					High	14,5 %	ugni blanc, mauzac, muscat, airen, viura, palomino, parellada, prosecco, glera	
	AROM	•	•	•	•		Low	14 %	chardonnay, sauvignon, chenin, sémillon, viognier, muscadelle	merlot, grenache, cinsault, cabernet franc, shiraz, cabernet sauvignon

	STRAIN	FRUITY ELEGANT	FRUITY INTENSE	STRUCTURED	RESTARTING AF	NITROGEN NEEDS	ALCOHOL TOLERANCE	VARIETALS
EXCELLENCE® YEASTS	XR® Grand rouge	•	•	•		Medium	> 16 %	cabernet sauvignon, merlot, grenache, shiraz, pinot noir, malbec
	DS Prestige	•	•	•		High	16 %	merlot, cabernet sauvignon, cabernet franc, shiraz, grenache, malbec
	SP Spicy	•	•	•		Medium	15 %	cabernet franc, shiraz, grenache, merlot, malbec, mourvèdre
	FR Red fruits	•	•	•		Medium	15 %	gamay, grenache, duras, carignan, carbonic maceration
L.A. YEASTS	HIGH DEGREE	•	•	•		Low	18 %	all
	L13	•	•	•		Medium	16 %	all

	STRAIN	ACTION	VARIETALS
EXCELLENCE® SPECIFIC YEASTS	 CELSIUS	A <i>Saccharomyces cerevisiae</i> strain selected for ABV reduction and obtaining balanced wines. This yeast gives aromas of fresh fruits with freshness and vivacity.	all
	X-FRESH	Non- <i>Saccharomyces</i> yeast for natural acidification of musts.	all
	B-NATURE	Non- <i>Saccharomyces</i> yeast for musts and grapes bioprotection.	all
	 FINISHER	A high fructophilic <i>Sacharomyces cerevisiae</i> specifically selected for AF restart.	all



BACTERIA

True pioneer in the technique of co-inoculation 15 years ago, Lamothe-Abiet has developed a deep and unique expertise in this process. The strains that we offer are adapted to the current demands for the control of the MLF.

œNO 1®

Strain of *œnococcus œni* selected for its resistance to difficult conditions, which may be used in direct inoculation but is also well adapted to co-inoculation.

BENEFITS

- ◆ Robust strain
- ◆ High quality production
- ◆ Control of the MLF and prevention of faults
- ◆ No production of biogenic amines

TO KNOW

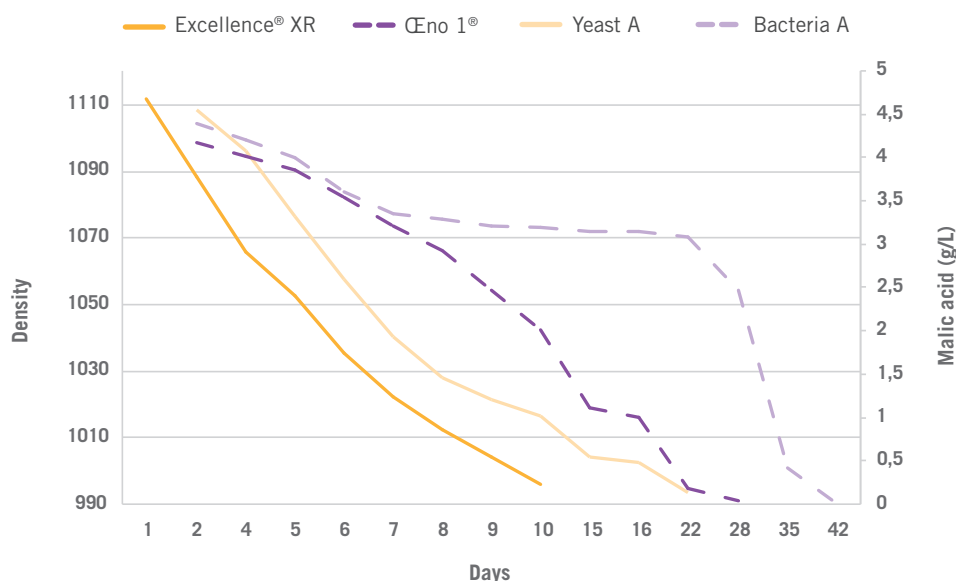
A four-year study conducted in France has clearly demonstrated that, on top of the technical benefits, co-inoculation also offers significant cost savings, which come from very well identified key points:

- ◆ Reduced electricity consumption for heating barrels and tanks to carry out MLF
- ◆ Lower costs of analysis to monitor malic and lactic acid levels in the different fermenting batches
- ◆ Less labour on operational management of malolactic fermentation (less racking, better barrel rotation...)

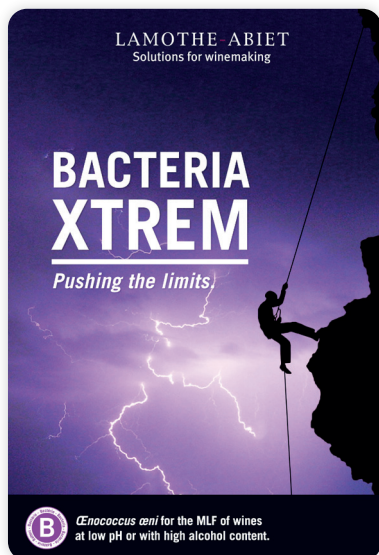
In most cases, the overall cost of MLF was divided by three, while ensuring technical efficiency and safety !

Monitoring of co-inoculations with Excellence® XR / œNo 1® and Yeast A / Bacteria A

Coonawara, Australia • Cabernet Sauvignon 2020 • TAVP 15,5% Vol.



For the pair Excellence® XR / œNo 1®, the AF and the MLF took place together. For the second yeast/bacteria pair, the MLF only really started after the AF had finished.



BACTERIA XTREM

Pushing the limits

A strain of *Enococcus oeni* for MLF in difficult conditions.

Malolactic fermentation is a key stage in winemaking, **improving the organoleptic profile** by adding **softness** and **roundness** on the palate. It is a real solution to bring balance to wines with high acidity.

Bacteria XTREM ensures the beginning of the MLF, thus **avoiding the development of indigenous strains** which could lead to organoleptic spoilages.

BENEFITS

Usable in **direct inoculation**, XTREM bacteria:

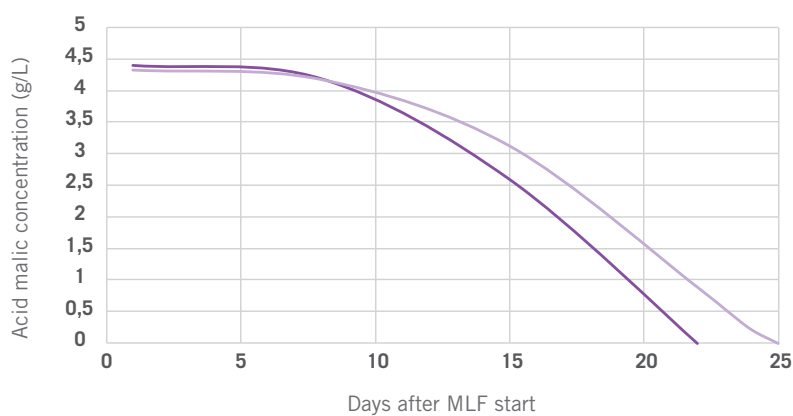
- ◆ Resists high alcohol contents (up to 16% abv.)
- ◆ Functions at very low pH (down to pH 3)
- ◆ Fast malic acid breakdown kinetics

Malic acid breakdown kinetics by the bacteria (g/L)

Spain • Albarino 2020 • TAV 12,88% vol.
pH 3,15 • Total acidity 5,87 g/L

◆ Control ◆ Bacteria XTREM

Bacteria XTREM, used in direct inoculation, helps to quickly complete the MLF. It shows itself to be as effective as the control bacteria which benefited from a rehydration and acclimatization protocol.



LAMOTHE-ABIET BACTERIA LIST

L.A SOLUTIONS

BACTERIA	EARLY CO-INOCULATION	LATE CO-INOCULATION	SEQUENTIAL INOCULATION	CURATIVE INOCULATION	PROTOCOL
CENO 1®	●	●	●	●	For co-inoculation, add directly without rehydration. In order to improve the distribution, rehydrate 15 minutes.
BACTERIA XTREM		●	●	●	Add directly without rehydration. In difficult conditions (pH < 3,2 or ABV > 15%), add 30 g/hL of d'OptiML®.
INOCULATION TIMING	24 - 48 hours after the start of AF	1010 density	AF completed or running off	Contact us	
TECHNICAL OBJECTIVES	Save time, avoid alterations	Save time, ensure the traditional process AF	MLF after AF, MLF in barrel	Sluggish MLF, restarting MLF	

OPTIMAL CONDITIONS FOR MALOLACTIC ACTIVITY

BACTERIA	PH*	TOTAL SO ₂ *	TEMPERATURE*	ALCOHOL TOLERANCE* (% VOL.)
CENO 1®	≥ 3,3	< 50 mg/L	18 - 24 °C	< 17
BACTERIA XTREM	≥ 3	< 50 mg/L		< 16

*These factors are co-dependent.

Explore our decision-making tool dedicated to **management of the MLF** available on our website. It will give you personalised recommendations adapted to your fermentation process:



Our decision-making tool for **Malolactic fermentation management** is also available on our application: **CENO Solutions**



NUTRIENTS

Yeast nutrition and protection are key factors for a successful fermentation.

Nutrition gives safe fermentation kinetics but also helps to optimise the production of aromas and to avoid organoleptic faults.

AROMA PROTECT®

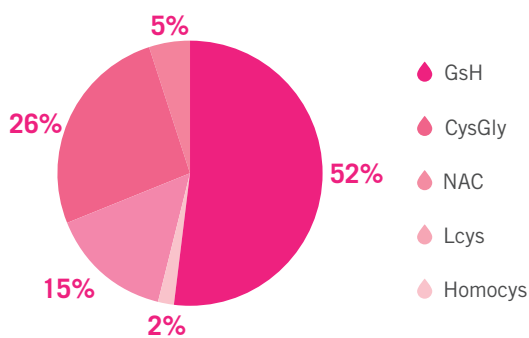
Preparation of inactivated yeasts naturally rich in glutathione and its precursors.

BENEFITS

- ◆ Specific formulation for optimal protection of the aromas and freshness on white and rosé wines
- ◆ Instantly counters oxidative mechanisms thanks to its high glutathione (GSH) levels. This sulphur tripeptide is naturally formed by yeast and possesses a very strong reductive capacity

Aroma Protect®

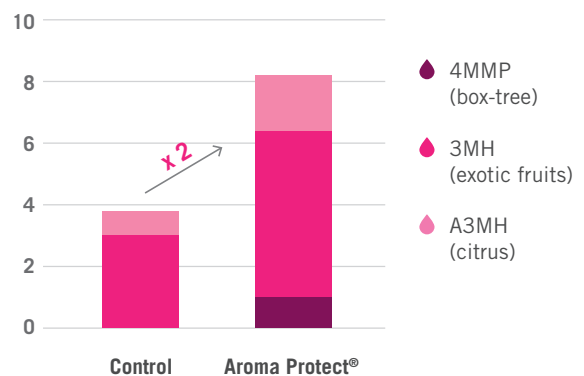
Proportion of different reductive compounds in the formulation



With over 50% glutathione, Aroma Protect® is a key product to preserve the aromatic potential during ageing.

Aromatic Index (AI) [volatile thiols] / perception threshold

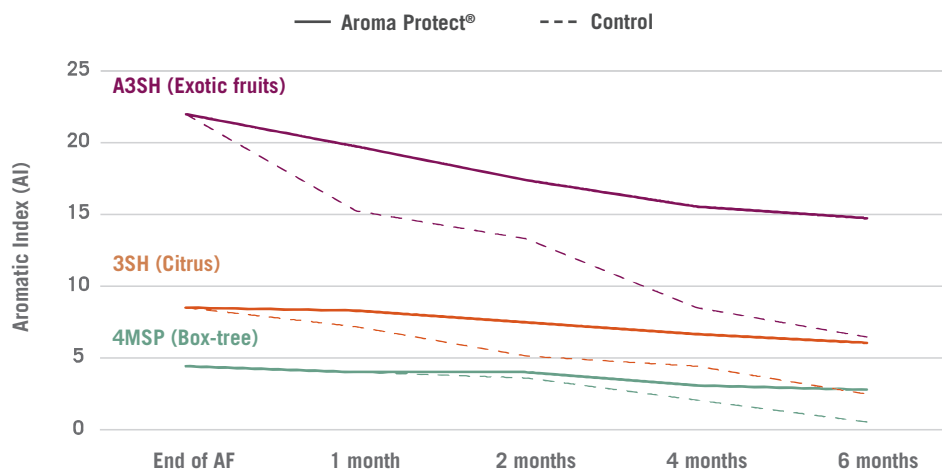
Grenache rosé trial • South-East France • 2018 Analysis 1 month after AF



1 month after the end of the AF, the aromatic intensity is twice higher for the modality treated with Aroma Protect®.

The role of Aroma Protect® on thiols during aging

Sauvignon blanc • added at 30 g/hL at the end of AF (d ≈ 1.010)



Thanks to its expertise in the process of aromatic expression by yeast, Lamothe-Abiet has developed **specific solutions** to increase the **revelation of thiols** and **esters** during alcoholic fermentation. These products improve the aromatic profile of wines and their intensity.

OPTITHIOLS®

Inactivated yeasts naturally rich in reductive compounds.

BENEFITS

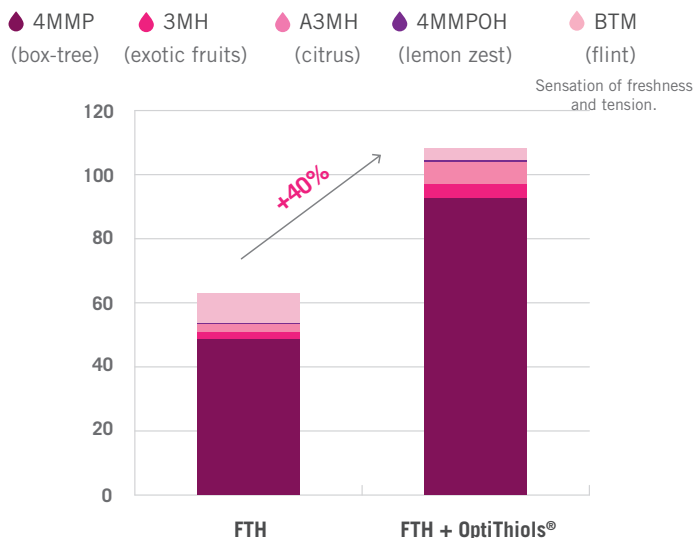
- ◆ Essential tool to optimize the thiol potential of white and rosé wines
- ◆ Double effect: antioxidant and significant aromatic increase of thiols (4MSP, 3SH, A3SH), from 30% to 120%
- ◆ Regularity and repeatability of the results on many different harvests (variety, terroir)

Note: Favour the use of Excellence® FTH and Excellence® TXL strains for an even greater revelation of volatile thiols.

Appropriate fining of the musts before addition will ensure better efficiency.

Aromatic index (AI)
[volatile thiols] / perception threshold

Graves Trial • Sauvignon blanc • 2022



OPTIESTERS®

Inactivated yeasts naturally rich in amino acids and ergosterols to stimulate the production of fermentary esters by yeasts.

BENEFITS

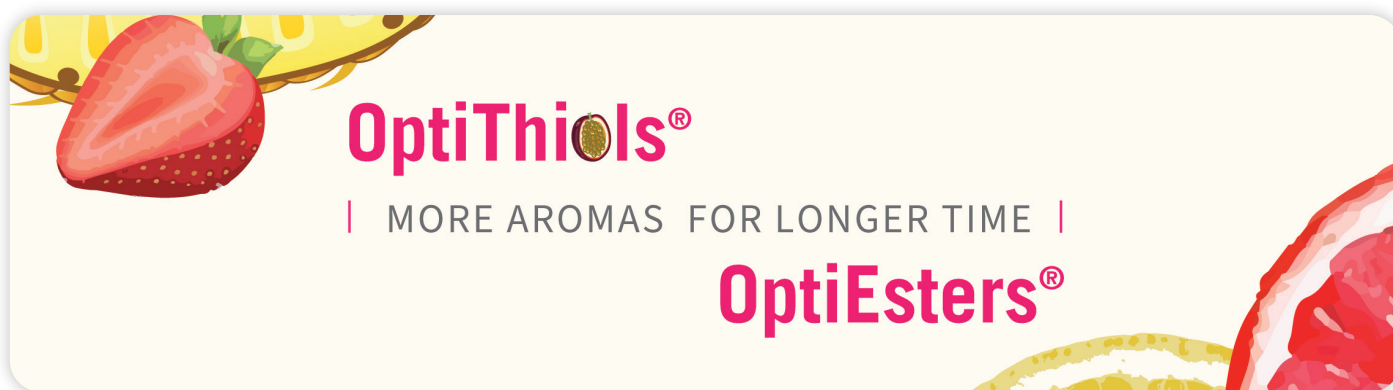
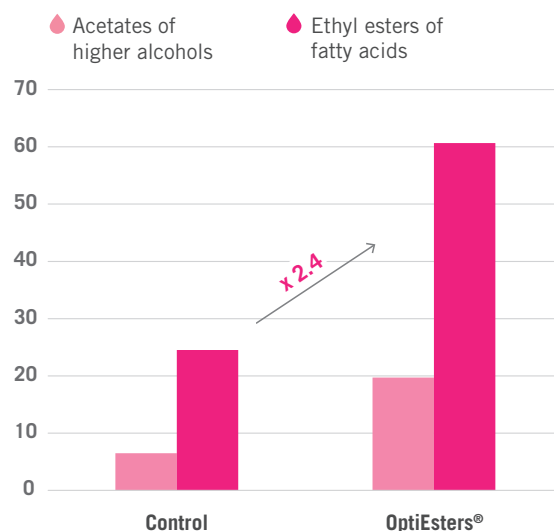
- ◆ An essential tool for maximising the ester potential of white, rosé and red wines
- ◆ Revealing fruity and floral aromas, especially on wines lacking varietal aromatic precursors
- ◆ Crucial role in both the quality and quantity of these aromatic esters

Note: Make sure to use a strain with high esters production: Excellence® STR / Excellence® Rosé / LA Arom.

Ester formation is closely linked to the nitrogen and lipid metabolism of the yeast and can therefore be improved by adding yeast derivatives.

Aromatic index (AI)
[fermentary esters] / perception threshold

Cognac trial • 2016





OPTIFLORE® O

Complex nutrient based on yeast autolysates, rich in organic nitrogen (amino acids, peptides), vitamins and minerals.

BENEFITS

- ◆ Guarantees a high quality and progressive yeast nutrition
- ◆ Avoids the risks linked to an exclusively mineral nutrition (nitrogen catabolic repression, induced deficiency, etc.)
- ◆ Maintains the populations' viability throughout the fermentation
- ◆ Adds aromatic complexity

MINERAL NITROGEN NUTRITION

- Used preferentially by the yeast
- Fast consumption
- Fast increase in yeast population

In case of excess:

- ◆ Induced deficiency
- ◆ H₂S production
- ◆ Sluggish and/or stuck AF
- ◆ Excessive heat production
- ◆ Stimulatory effect on nitrogen catabolic repression (NCR)

ORGANIC NITROGEN NUTRITION

- Progressive use
- Repression of H₂S production
- Nutrition for yeasts and malolactic bacteria
- Does not cause nitrogen catabolic repression
- Increases the aromatic complexity

Our decision-making tool for **Calculate your nutritional needs during fermentations** is also available on our mobile application:

œnoSolutions



"The Côtes de Gascogne IGP is characterised by a great diversity of varieties and pedoclimatic conditions.

Optiflore® O quickly took its place for us as a useful and polyvalent tool. When faced with nitrogen deficiencies, high alcohol and low pHs, Optiflore® O optimises the activity of yeasts in the Excellence range. Optiflore® O safeguards conventional and organic vinifications, and has allowed us to resolve several issues regarding the aromatic expression of our dry and sweet white wines, and the structure of our red and rosé wines."



BENOIT GISSON, CONSULTANT WINEMAKER,
œNOPOLE DE GASCOGNE, GERS, FRANCE

OPTIML®

Specific nutrition for malolactic fermentation to support the development and viability of malolactic bacteria.

OptiML® helps to promote a **fast start** and **good progression** of the **malolactic fermentation**. It contains yeast hulls which help to **detoxify the medium** by adsorbing inhibitory compounds (medium chain fatty acids, pesticide residues). OptiML® also contains **inactivated yeasts rich in nutritive elements** necessary for malolactic bacteria

growth (amino acids, vitamins and minerals). OptiML® helps to **guarantee the malolactic fermentation** and **supports the malolactic bacteria in difficult conditions** (low pH, high ABV, late MLF). Organoleptically neutral, this solution can be used for all types of wine.

AROMATIC PROTECTION & BOOSTER		AROMATIC REVELATION	VARIETAL PROFILE	COMPLEX AND FRUITY PROFILE	AROMATIC PROTECTION	COLOUR FIXATION	ROUNDNESS	DOSAGE (g/hL)
AROMA PROTECT®	P	.			●			10 - 40
AROMA T'N'T	P / AR	●		●	●			10 - 40
OPTIESTERS®	AR	●	.	●			.	30 At the end of the first third of AF
OPTITHIOLS®	P / AR	●	●	.	.		.	30 At the beginning of AF
NATUR'SOFT®	P			.		●	●	20 - 100

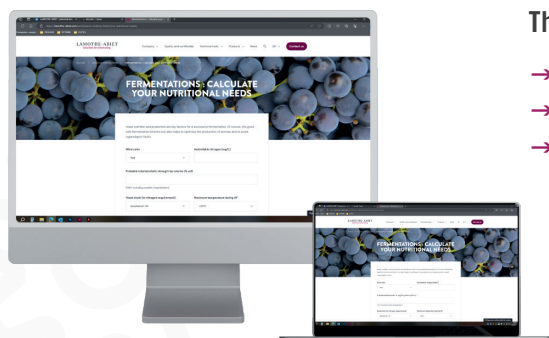
COMPLEX NUTRIENTS		THIAMINE	AMMONICAL NITROGEN	ORGANIC NITROGEN	VITAMINS / MINERALS	DETOXIFICATION	STEROLS / UNSATURATED FATTY ACIDS	YAN INCREASE ADDED (mg/L PER 20 g/hL)	DOSAGE (g/hL)
OPTIFLORE® O	N / P			●	●	●	.	10 mg/L of YAN under organic form	20 - 80 before end of AF
OPTIFERM®	N / P	●	DAP ●	●	●	.		30	20 - 40
OPTIML® (BACTERIA)	N / P			.	●	●	.	0	20 - 40

YEASTS PROTECTION		CELLULOSE POWDER	DETOXIFICATION	VITAMINS / MINERALS	STEROLS / UNSATURATED FATTY ACIDS	ORGANIC NITROGEN	DOSAGE (g/hL)
CEHOSTIM®	N / P		●	●	●		30
ACTIBIOL	N / P / S	●	.	●	.	.	30 - 60
FLOR'PROTECT®	P / S		●				20 - 40 max. legal dosage in EU: 40

N Nutrition
 P Protection
 S Support element
 A Aromatic revelation

Discover our new decision making tools !

Available on our website at Technical tools / Decision-making tools.



These tools will help you to:

- Calculate your nutritional needs during fermentations
- Manage malolactic fermentations
- Calculate the active SO₂

TRY THEM NOW!
at www.lamothe-abiet.com



ENZYMES

Our expertise in oenology and biotechnologies enables us to offer you the most complete and trusted enzymatic preparations on the market. Lamothe-Abiet offers you the guarantee of enzymes that are certified by the latest FSSC 22000 quality standards.

ÆNOZYM® CRUSH

Highly concentrated enzymatic preparation specifically formulated for grape maceration.

BENEFITS

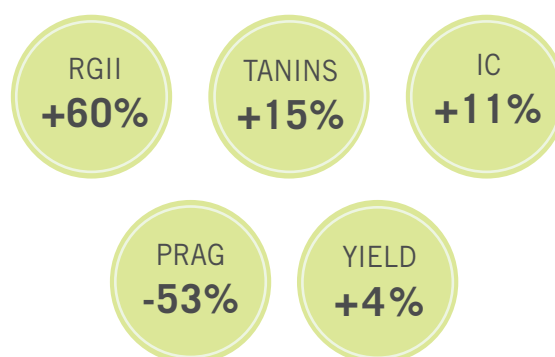
ON RED GRAPES:

- ◆ Improve extraction of skin compounds:
 - Phenolics compounds
→ increase color intensity and stability
 - Plant polysaccharides
→ decrease astringency perception
- ◆ Optimize yield of free-run and press wines (6-10%)

ON WHITE GRAPES:

- ◆ Improve wine filterability
- ◆ Increase yield of free-run juice: 3-10%
 - Use lower pressure and shorter press cycle
→ less phenolic compounds extracted, less vegetal aromas, shorter pressing time

RGII: rhamnogalacturonane | IC: Color Intensity
PRAG: polysaccharides rich in arabinose and galactose



ÆNOZYM® CLAR

Liquid enzymatic formulation to accelerate the clarification of musts before alcoholic fermentation.

BENEFITS

- ◆ Increase juice yield by compacting lees
- ◆ Accelerate settling time: fast depectinization and flocculation
- ◆ Formulation active at low (<5°C) and high (<68°C) temperature
- ◆ Suitable for clarification by static settling and flotation
- ◆ Suitable for thermo-vinification
- ◆ Improve wine filterability

ÆNOFLOW MAX

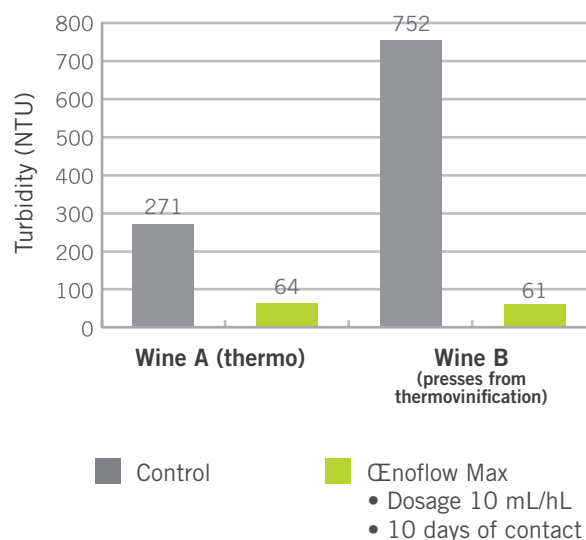
A mixed formulation of pectolytic enzymes from *Aspergillus niger* and β -glucanase from *Trichoderma harzanium* to improve filterability of wines and musts and for cross-flow CIP to recover flow rates.

The specific characteristics of the variety or the vintage have a great effect on the wine filterability. Poor settling and filtration problems can be due to many factors such as residual pectins and/or glucans. If classic pectolytic enzymes have not done the job other enzymatic activities are required to broaden the spectrum of action. Ænoflow® Max is **rich in specific enzymatic activities** (pectinase, AG-II-hydrolase, cellulase, hemicellulase and β -glucanase) and acts on the most branched parts of the pectin molecules and so **optimises their hydrolysis**. The wines are therefore **cleared of polysaccharides in suspension** (pectins and glucans), greatly **improving wine filterability**. Ænoflow® Max is also a very **effective enzymatic CIP treatment for cross-flow filters**, which accumulate polysaccharides on the membranes over time. One enzymatic CIP treatment of Ænoflow® Max can improve cross-flow flux significantly.

Optimise your filterability!

NEW

Trial 1 - Turbidity measured after treatment
Cabernet sauvignon - Bordeaux - 2021



ÆNOZYM® THIOLS

The secret of varietal aromas

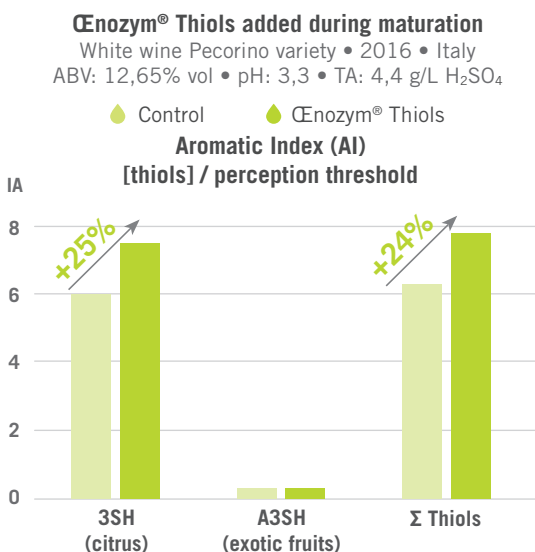
Pectolytic enzyme preparation from *Aspergillus niger*, rich in secondary activities and to increase the aromatic expression of white and rosé wines.

Depending on the moment of application, it can modulate the **aromatic profile** of wines:

BENEFITS

◆ **Used during alcoholic fermentation:** enhances the liberation of thiol aroma precursors such as 4MSP (box-tree) and 3SH (citrus fruit) and thus indirectly increases conversion by the yeast to A-3SH (tropical fruits).

◆ **Added during maturation or a few weeks before bottling:** will help to free thiol precursors (4MSP and 3SH) already present in the wine (which, when in precursor state linked to cysteine or glutathione, are non-oxidizable compounds). The conversion to A3SH by the yeast is impossible in this case.



ÆNOZYM® RED EXPRESSION

Bring together sweetness and freshness

A new pectolytic enzyme preparation extracted from *Aspergillus niger*, rich in secondary activities and very specific for the aromatic expression of red grapes.

Drawing on our expertise in thiol varietal aroma revelation, Lamothe-Abiet has developed Ænozym® Red Expression. When used during fermentation, this enzyme:

BENEFITS

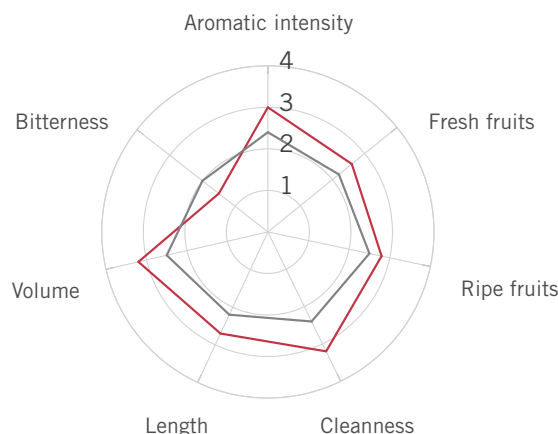
- ◆ Helps to extract polysaccharides and aroma precursors, thus revealing the intensity of "fresh fruit" characteristics
- ◆ Brings softness and sucrosity to red wines

Blind tasting by 12 professionals

Pinot noir • 2020 • Beaujolais • Addition of 5mL/hL during AF

◆ Control ◆ Ænozym® Red Expression

SENSATIONS ON THE PALATE



LAMOTHE-ABIET ENZYMES LIST

L.A SOLUTIONS

LIQUID ENZYMES	MACERATION	CLARIFICATION	EXTRACTION	TYPE OF WINE	DOSAGE	RECOMMENDATIONS
ÆNOZYM® CRUSH	●	●	●	◆◆◆	10 - 30 mL/Ton	◆ Improves extraction of skin compounds, color, phenolic structure, press yield. ◆◆◆ Improves extraction of skin compounds (aromatic precursors, polysaccharides), press yield.
ÆNOZYM® CLEAR		●		◆◆	0.5 - 3 mL/hL	Addition at press pan or in tank; static settling and flotation. Can be used on wines to improve filtrability.

SPECIFIC ENZYMES		CLARIFICATION	FERMENTATION	MATURATION	FILTRATION	TYPE OF WINE	DOSAGE	RECOMMENDATIONS
NEW ÆNOFLOW MAX		●		●	●	◆◆◆	5 - 10 mL/hL	Adjust the dose according to the length of time before filtration.
ÆNOZYM® RED EXPRESSION	L		● Freshness and sweetness	● Freshness and sweetness		◆	4 - 6 mL/hL	Add after the start of AF to benefit from natural inerting. When used in combination with an extracting enzyme, we recommend to slightly reduce its dose.
ÆNOZYM® THIOLS			● Revelation of thiol aromas	● Revelation of thiol aromas		◆◆	4 - 6 mL/hL	Add after the start of AF to benefit from natural inerting. During AF: revealing 3MH, 4MMP and 3MH thanks to the synergy with yeasts. During ageing: revealing 3MH and 4MMP.
VINOTASTE® PRO*	P	●		● + Roundness	●	◆◆◆	4 - 10 g/hL	Active at all pH. Increase the dosage by 30 % if T < 12 °C

L Liquid G Granulated P Powder



TANNINS

The result of a fast-moving research, our tannins are created in our specialised production unit.

The quality of the products and their effectiveness are guaranteed by rigorous selection of the raw materials, and by our knowledge and control of the production process. The specific micro-granulated (MG) and granulated (G) formulation of our tannins, with instant solubility, allows direct addition to must or wine. Homogeneous dispersion by stirring or pumping over guarantees immediate and effective action of the tannin.

PRO TANIN R®

Preparation of instantly soluble proanthocyanidic tannins.

BENEFITS

- ◆ Binds the must proteins that cause an early loss of desirable phenolic compounds
- ◆ Inhibits laccase, an enzyme that causes drastic and irreversible oxidation in botrytised musts and wines

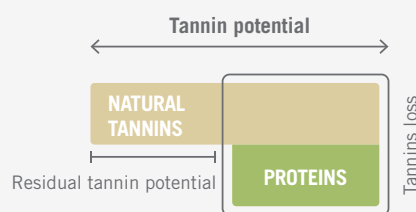
PRESERVING THE TANNIN POTENTIAL

- 1 The tannin potential of a must is preserved thanks to the buffer effect of Pro Tanin R®.

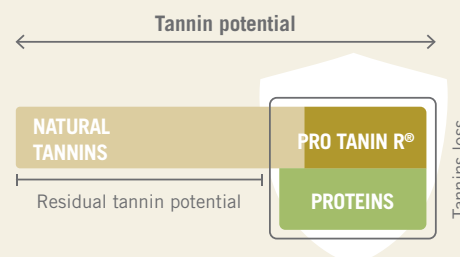
LACCASE ACTIVITY INHIBITION

- 2 A small laccase activity in the must considerably diminishes the visual quality of the future wine. The use of Pro Tanin R® suppresses this laccase activity and maintains the colour potential of the future wine.

WITHOUT PRO TANIN R®



WITH PRO TANIN R®



Trials conditions

Cabernet Sauvignon • Graves • 2016 • ABV: 11,5% vol • pH: 3,52

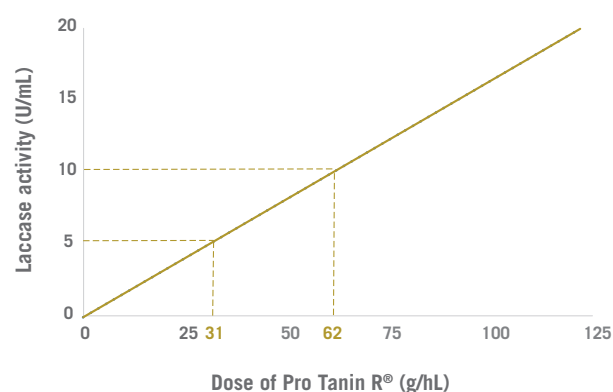
	Laccase activity on must (U/ml)
Control	4
½ dosage Pro Tanin R®	1
1 dosage Pro Tanin R®	0



*Dosage recommended by Botrytest

10 g/hL 20 g/hL

Amount of Pro Tanin R® to inhibit laccase activity

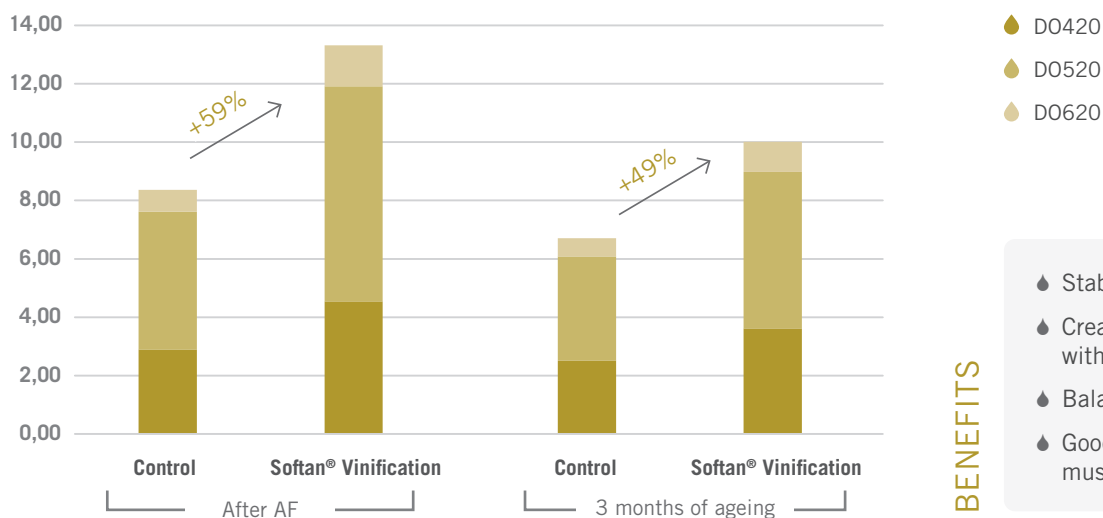


SOFTAN® VINIFICATION

A combination of catechic tannins and plant-derived polysaccharides to be added at the beginning of alcoholic fermentation for early stabilisation of wines' colour.

Softan® Vinification: addition of 30 g/hL during fermentation on D+1.
ICM variation after AF and after 3 months of ageing

Thermovinified Merlot • Bordeaux • ABV: 14.1% vol • pH: 3.45



BENEFITS

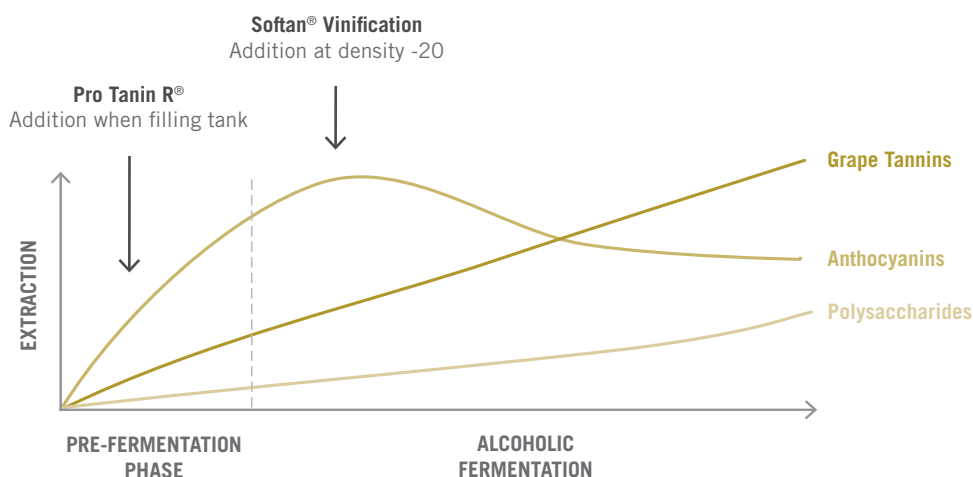
- ◆ Stabilises the colour of wines
- ◆ Creates stable bonds with anthocyanins
- ◆ Balances wines' structure
- ◆ Good reaction with must proteins

TO KNOW

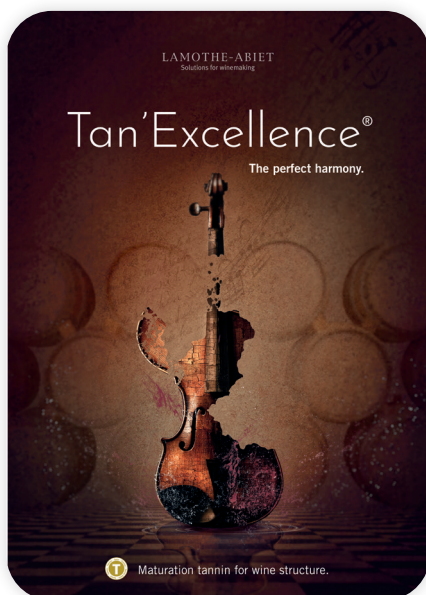
Based on Lamothe-Abiet's own technology, the Softan® range offers solutions for the entire winemaking process thanks to its specific tannin formulations combined with natural plant derived polysaccharides.

This technique is based on a phenomenon that occurs naturally in wine: the coating of tannins by polysaccharides. Softan® **products significantly increase volume and length on the palate** without causing dryness or astringency.

Optimise your colour with the synergy between Pro Tanin R® / Softan® Vinification



The synergistic action of **Pro Tanin R®** and **Softan® Vinification**, when added at the right moment, is effective in preserving the tannin potential and stabilising the colour.



TAN'EXCELLENCE®

The perfect harmony

A rigorous selection of oak tannins, grape tannins and proanthocyanidic tannins rich in catechins to be use during vinification and ageing.

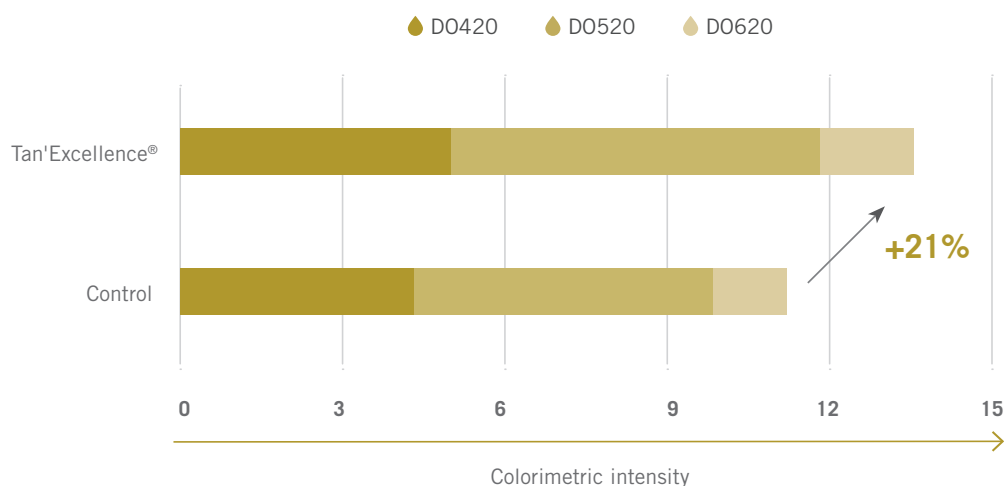
Its directly soluble formulation makes this tannin easy to use.

BENEFITS

- ◆ Participates in wine clarification
- ◆ Durable colour stabilisation
- ◆ Protection against wine oxidation
- ◆ Improves the structure and provides a harmonious balance to great red wines

Colorimetric analysis (ICM)

Cabernet Sauvignon • 2019 • Lamothe-Abiet Experimental Center
Tan'Excellence® at 10 g/hL during fermentation • Analysis 1 month after bottling



TAN&SENSE®

The final touch

High quality oak and grape tannins for ageing.

Added during ageing or before bottling, Tan&Sense® tannins participates in clarification and **protect wines against oxidation**, while maintaining the wine's **balance** and **fruitiness**.

Thanks to a unique extraction process, and a **gradual toasting**, the tannins from the Tan&Sense® range express a great potential to give harmonious wines that meet winemakers' objectives.

UNTOASTED
TANNIN



INTENSELY
TOASTED
TANNINS



	VINIFICATION TANNINS	COMPONENTS	INHIBITION OF LACCASE ACTIVITY	ANTIOXYDANT ROLE	REACTIVITY WITH PROTEINS	COLOR STABILISATION	ROUNDNESS	ADDITON TIME	TYPE OF WINE	DOSAGE (g/hL)
MUST & WINE	PRO TANIN R®	Proanthocyanidic tannins	●	●	●	●		Tank filling	●	Healthy harvest: 10 - 30 Affected harvest: 30 - 80
	SOFTAN® VINIFICATION	Catechic tannins bound to vegetal polysaccharides	●	●	●	●	●	Δ - 30 or D+1 post tank filling	●	10 - 40
	TANIN GALLIQUE À L'ALCOOL	Gallic tannins	●	●	●			Spoiled mechanical harvest, pre- fermentation maceration, pressing, fining	● ●	3 - 15

	MATURATION TANNINS	COMPONENTS	COLOR STABILISATION	CONTROL OF REDOX POTENTIAL	STRUCTURE	ROUNDNESS	PROFILE HARMONISATION	TYPE OF WINE	DOSAGE (g/hL)
BEGINNING OF AGEING	TAN' EXCELLENCE®	Grape tannins, oak tannins and catechic tannins	●	●	●	●	●	●	3 - 30
	SOFTAN® POWER	Proanthocyanidic and ellagic tannins bound to vegetal polysaccharides	●	●	●	●	●	●	10 - 40

THROUGHOUT THE AGEING PROCESS	VINITAN® ADVANCE	Grape tannins	●	●	●	●	●	●	1 - 10
	TAN&SENSE® VOLUME	Pure oak tannins	●	●	●	●	●	●	1 - 10
								● ●	0,5 - 3
	SOFTAN® SWEETNESS	Proanthocyanidic and ellagic tannins (from fresh and toasted oak) bound to vegetal polysaccharides	●	●	●	●	●	●	10 - 40
								● ●	1 - 3

END OF AGEING PROCESS	TAN&SENSE® ORIGIN	Pure tannins of toasted oak of stave quality	●	●	●	●	●	●	1 - 10
								● ●	0,5 - 3
	TAN&SENSE® EXPRESSION	Medium toasted oak tannins	●	●	●	●	●	●	1 - 10
								● ●	0,5 - 3
	TAN&SENSE® FORTE	Intensely toasted oak tannins	●	●	●	●	●	●	1 - 10
								● ●	0,5 - 3
	SOFTAN® FINITION	Toasted oak tannins bound to vegetal polysaccharides	●	●	●	●	●	●	10 - 40
								● ●	1 - 3

*Guidelines only: carry out trials to determine the optimal dosage for each type of wine.



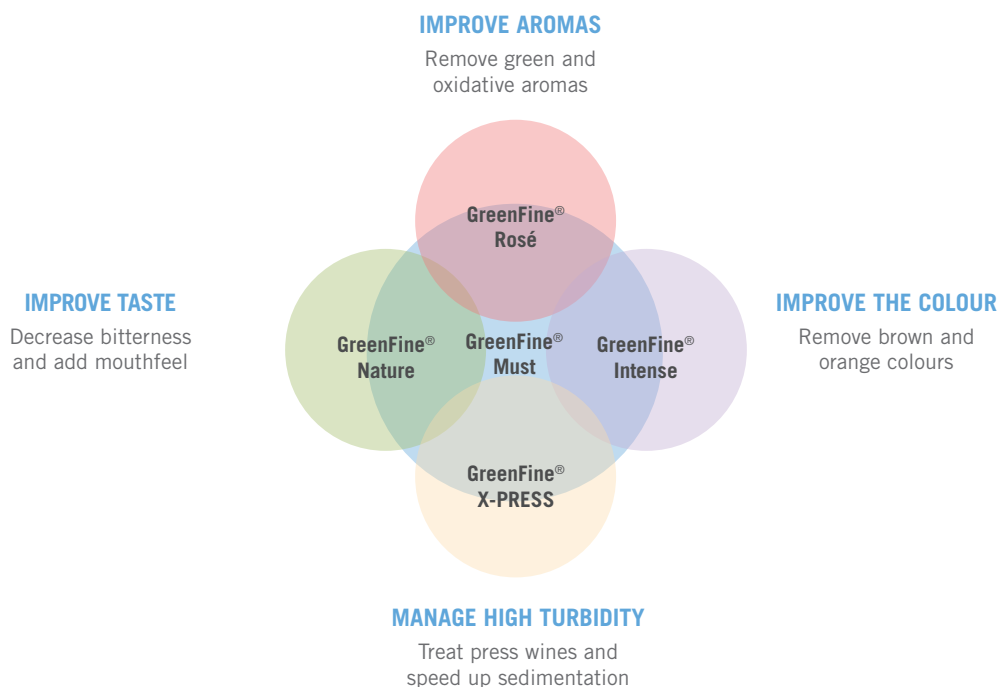
Must fining, carried out before or during alcoholic fermentation, is an essential step in white and rosé winemaking. Lamothe-Abiet offers enological solutions that are adapted to the winemaker's objectives.

GREENFINE®

Give peas a chance

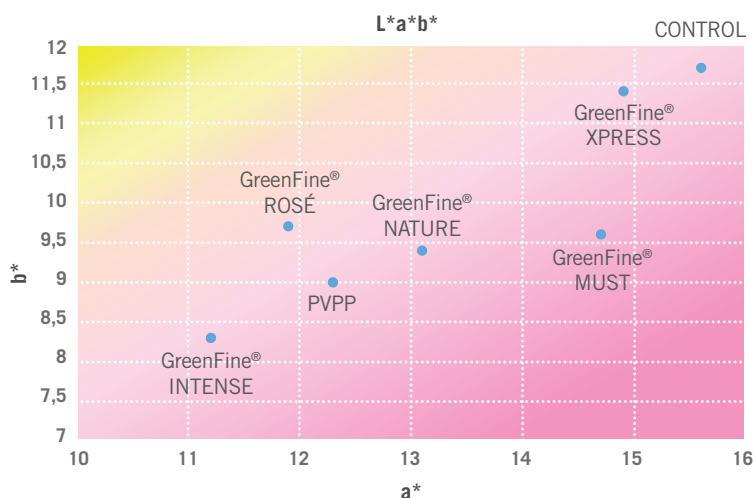
Based on pea vegetal proteins and without allergen*, products from the Greenfine® range are formulations that specifically fulfill various objectives:

*Except GreenFine® Must L, stabilised with sulphur dioxide (E220).



Effect of must fining on the colour of rosé wines

Merlot Rosé • Bordeaux • 2023
Dosage: 50 g/hL - Addition during clarification

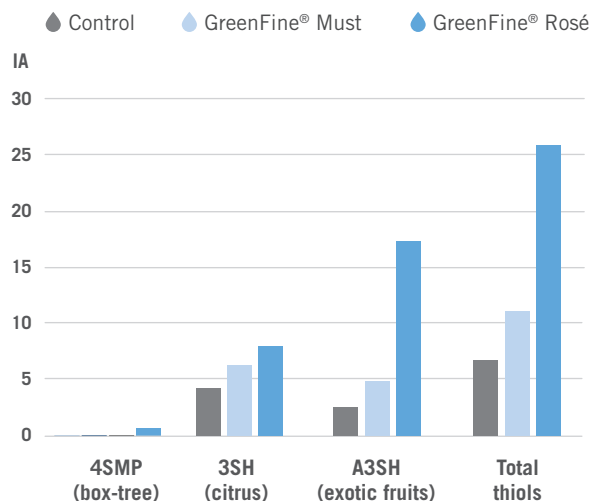


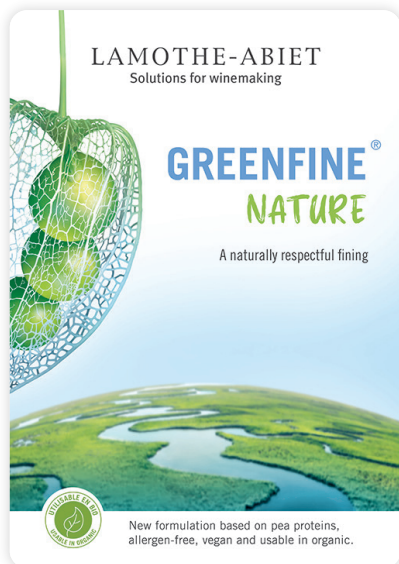
*analysis by chromametry (L*a*b*) enables a simple, quick and objective measurement of must and wine colours as perceived by the human eye.

Effect of must fining on wines' aromatic profile

Sauvignon blanc • Graves • 2016 • Dosage: 50 g/hL

Aromatic index (AI)
[thiols] / perception threshold





GREENFINE® NATURE

A naturally respectful fining

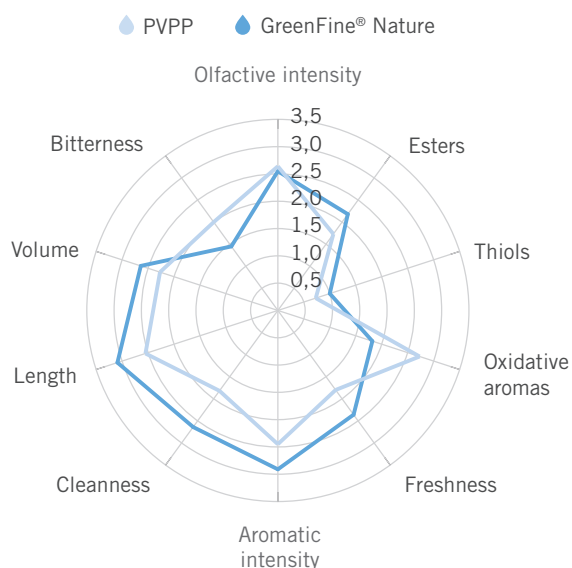
Specifically formulated to offer a **100% natural alternative to the use of PVPP**, Greenfine® Nature combines the physical and chemical properties of plant proteins (pea), inactivated yeasts and bentonite to **effectively remove oxidised and oxidisable polyphenols**.

Its use in must and wine fining **enhances aromatic potential, protects against oxidation and reduces bitterness** by adding **fullness on the palate**.

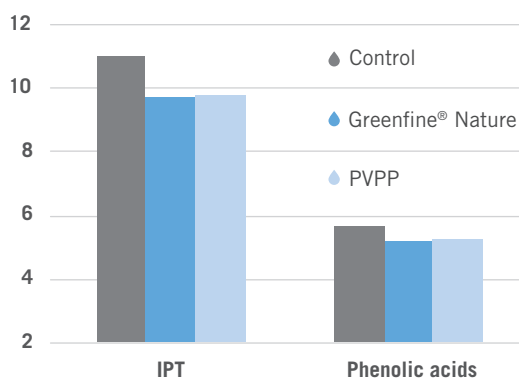
Greenfine® Nature is part of an innovative dynamic to use **environmentally-friendly** fining products, and represents a solution that is perfectly suited to **managing colour** and **enhancing the aromatic** profile of wines.

Vegan, allergen-free fining solution for use in organic winemaking.

Comparative tasting

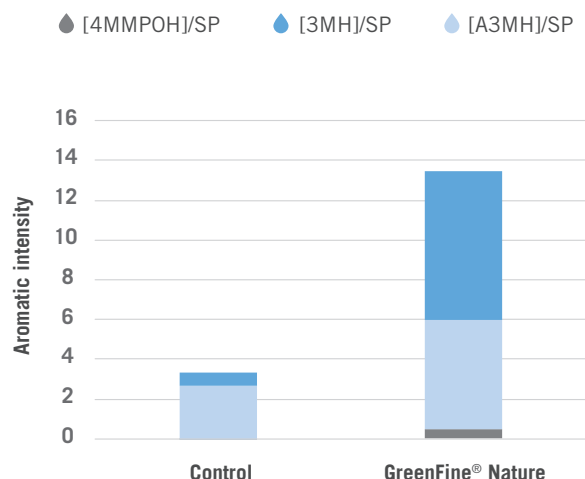


Total Polyphenol Index (D0280) and Phenolic Acids (D0320)



Effect of must fining on wines' thiol profile

Rosé Merlot • Entre Deux Mers • Dose: 30 g/hL



"We use **GreenFine® Nature** on all types of white and rosé musts, changing the rate depending on what kind of correction needs to be made. It can also be used during fermentation, if prior fining doesn't appear to be enough.

Having been an active player in the development of this formulation, GreenFine® Nature is today an essential product in the GreenFine® range, allowing **early improvement of must colour**, but also **increasing finesse** and **removing bitterness** when necessary. GreenFine® Nature is an excellent alternative to casein on musts affected by downy mildew."



GILLES BAUDE, CONSULTANT WINEMAKER
PROVENCE CŒNOLOGIE, FRANCE

GREENFINE® ROSÉ

Synergy between pea protein and PVPP

Allergen free formulation for preventative and curative treatment of white and rosé musts.

BENEFITS

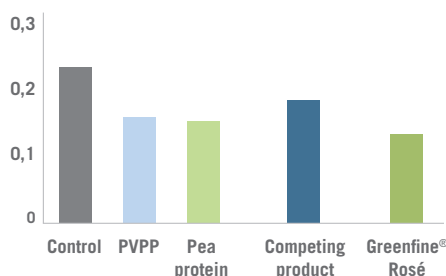
- ◆ The association of pea proteins and PVPP offers a complete action to reduce oxidisable (DO320) and oxidised (DO420) phenolic compounds. It decreases bitterness and off flavours (mouldiness/greenness)
- ◆ Removing undesirable elements from musts maximises the aromatic potential and optimises aromas preservation in the wine
- ◆ Efficient in decreasing yellow colours, thus reducing orange tones



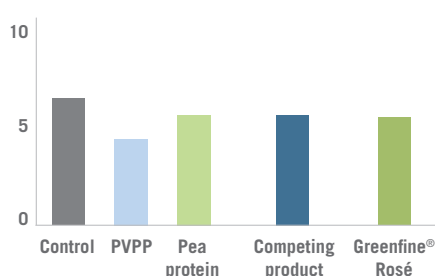
Fining trial on white must

Sauvignon blanc must

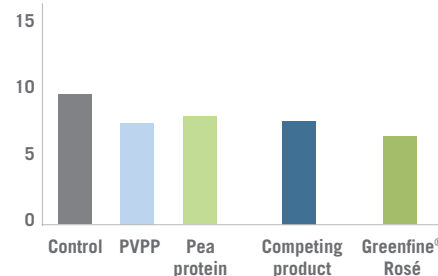
Results DO 420
(yellow colour)



Results DO 320
(oxidisable and oxidised polyphenols)



Results IPT
(total polyphenol index)



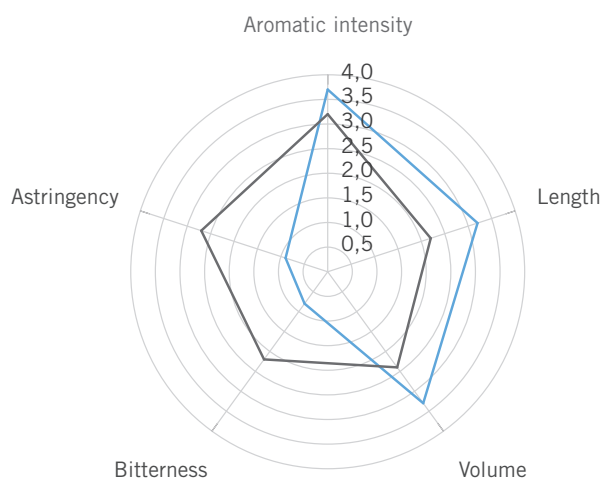
RED WINE FINING: VEGAN ALTERNATIVES!

Red wine tasting results (15 experienced tasters) after use of GreenFine® range fining agents

Fining: GreenFine® Nature

Pinot noir • Burgundy • 2021 • 20 g/hL

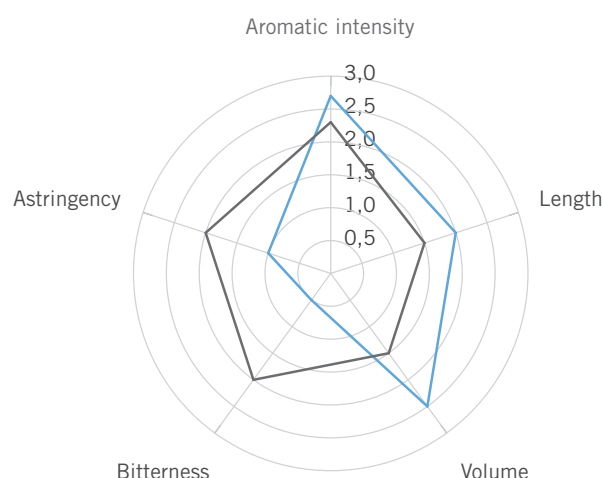
◆ Control ◆ GreenFine® Nature



Fining: GreenFine® X-PRESS

Gamay • Beaujolais • 2021 • 30 g/hL

◆ Control ◆ GreenFine® X-PRESS



Our trials have demonstrated the **efficiency** of the GreenFine® range products for fining red wines in **removing astringency** and **increasing volume**. Each wine being different, we recommend that you carry out fining trials beforehand in order to find the product the most adapted to your objectives.

			REDUCE BITTERNESS	COLOR STABILITY	DECREASE VEGETAL	TREAT OXIDATION	TYPE OF WINE / APPLICATION	DOSAGE*
FINING PRODUCTS BASED ON PEA PROTEINS	GREENFINE® MUST (Pea proteins) Greenfine® Must L : liquid	P	•	•	•	•	Must / Wine	10 - 50 g/hL L : 10 - 50 cL/hL
	GREENFINE® NATURE (Pea proteins, inactivated yeasts, calcium bentonite)		•	•	•	•		10 - 80 g/hL
	GREENFINE® ROSÉ (Pea proteins, PVPP)		•	•	•	•	Must / Flotation	10 - 80 g/hL
	GREENFINE® INTENSE (Pea proteins, discolouring activated carbon, PVPP, calcium bentonite)		•	•	•	•		10 - 120 g/hL
	GREENFINE® X-PRESS (Pea proteins, PVPP, calcium bentonite, Chitin-Glucan)		•	•	•	•	Must / Wine	10 - 100 g/hL
PROTEIN FINING AGENTS	GÉLATINE SPÉCIALE VINS FINS	L	•	•	•		Aged wine	2 - 10 cL/hL
	GELDOR® (Gelatin)		•	•	•		Young wine / Thermovinification	1,5 - 6 cL/hL
	COLLE DE POISSON LA	P	•		•		Wine for laying down	1 - 3 g/hL
	NATUR'FINE® PRESTIGE (Inactivated yeasts, pectolytic enzymes)		•	•	•		Wine for laying down	5 - 40 g/hL
	OPTIFINE (Inactivated yeasts, pea proteins)		•	•	•	•	Beginning of ageing	20 - 40 g/hL
COMPLEX FINING & PVPP	POLYMIX® NATUR' (PVPP, calcium bentonite, inactivated yeasts)	P	•	•	•	•	Must during AF	15 - 100 g/hL

L Liquid **P** Powder

*Guidelines only: carry out fining trials to determine the optimal dosage for each type of must and wine. Respect the maximum authorized dosages according to the current regulations.

GREENFINE® NATURE

A naturally respectful fining

New formulation based on pea proteins, allergen-free, vegan and usable in organic.



STABILISATION

Stabilisation strategy helps to increase the effectiveness of oenological treatments, to limit the number of subsequent treatments, and also to limit organoleptic losses (colour, aromas).



KILLBRETT®

Take control

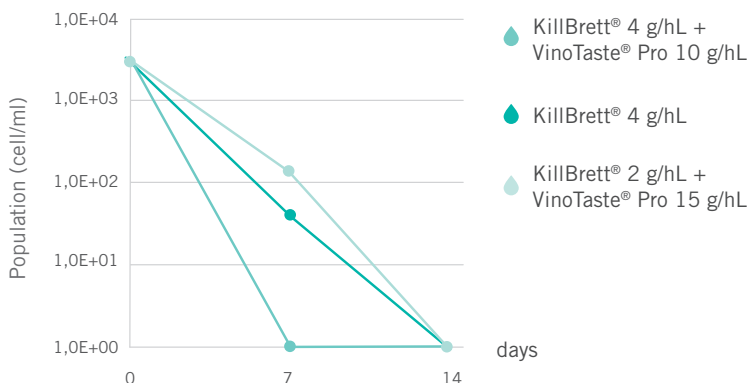
Made 100% from a high purity chitosan exclusively of fungal origin.

To eliminate *Brettanomyces*, **KillBrett®** is shown to be the easiest and most wine-friendly alternative to DMDC and physical treatments. Chitosan contained in **KillBrett®** causes the lysis of the cell walls of *Brettanomyces* and its sedimentation at

the bottom of the barrel or tank. **KillBrett®** is a natural product, non-animal origin and non-allergenic, produced of 100% fungal chitosan (*Aspergillus niger*) which the reduction of microbial load is widely demonstrated.

Effect of KillBrett® on *Brettanomyces* populations

Initial population = 3000 cell/ml



Recommended dosages:

Initial contamination	Recommended treatment
Moderate $\pm 10^2$ cell/mL	KillBrett® 4 g/hL
High $\pm 10^3$ cell/mL	KillBrett® 4 g/hL + VinoTaste® Pro 10 g/hL
very high $\geq 10^4$ cell/mL	KillBrett® 6 g/hL + VinoTaste® Pro 10 g/hL
Preventive treatment (after MLF)	KillBrett® 4 g/hL

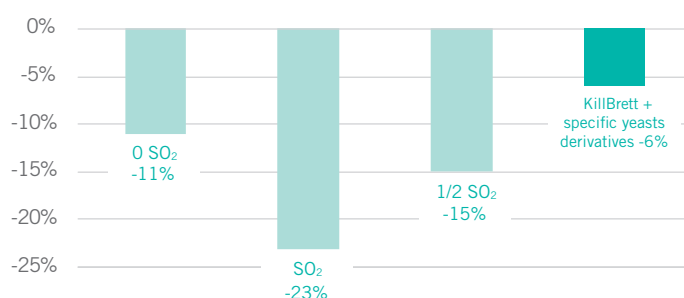
TO KNOW

KillBrett® causes cellular lysis and a fining of *Brettanomyces* thus saving your wines from contamination. We recommend that you adapt the treatment according to the observed population of *Brettanomyces*.

KillBrett® enables the microbial environment to be managed during red wine maturation. Combined with a yeast derivative rich in reductive compounds (like glutathione), it's an excellent tool to **reduce or even get completely rid of sulfites** during ageing. An early addition helps to preserve the wine colour intensity as well as its organoleptic profile.

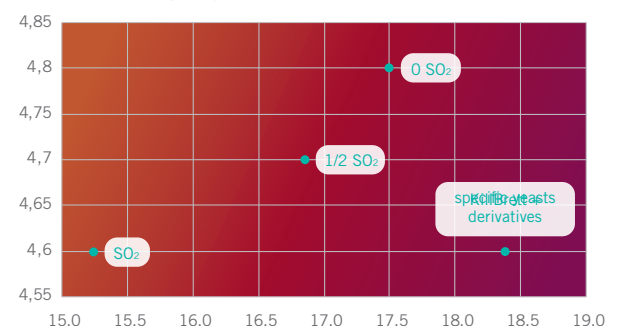
Loss of ICM between start of maturation and after 9 months

Burgundy • Static 2019 • Pinot Noir



Loss of ICM between start of maturation and after 9 months

Burgundy • Static 2019 • Pinot Noir



MANNO'GOM®

Enhance the richness of wines

A combination of plant polysaccharides and yeast cell wall extract rich in mannoproteins and sapid peptide.

Manno'Gom® enhances the organoleptic qualities of wines thanks to precise management of the balances on the palate.

BENEFITS

- Increases the sensation of sucrosity
- Reduces bitterness
- Enhances fruitiness
- Increases colloidal stability

MANNO'SENSE®

Increase your balance

Formulation of mannoproteins rich in Hsp12 sapid peptides.

This peptide, released during yeast autolysis, plays a crucial role in the perception of sucrosity in dry wines. Manno'Sense® is a natural solution for improving the organoleptic qualities of white, rosé and red wines.

BENEFITS

- Brings balance and freshness on the palate
- Improves aromatic persistence
- Does not affect the clogging index or CFLA (Lamothe-Abiet filtration criteria)
- Contributes to wines' tartaric stabilisation

SUBLI'SENSE®

Sublime flavours

Solution of arabic gum and mannoproteins from *S. Cerevisiae* yeast mannoproteins for fine-tuning the organoleptic qualities of your wines.

Subli'Sense® contributes to the colloidal stability of white, rosé and red wines.

BENEFITS

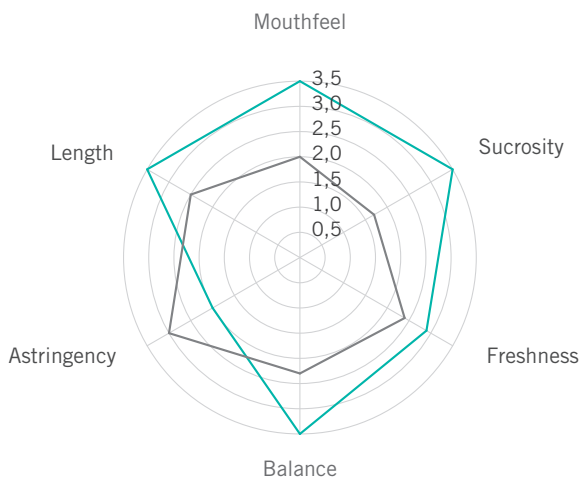
- Increases roundness and flavours
- Reduce tannins' harshness
- Improves softness and length on the palate
- Does not affect the clogging index or CFLA (Lamothe-Abiet filtration criteria)

TASTING RESULTS OF WINES (15 TRAINED TASTERS)

After treatment with Manno'Sense®

10 cL/hL before bottling
Médoc • Cabernet sauvignon • Merlot • 2019

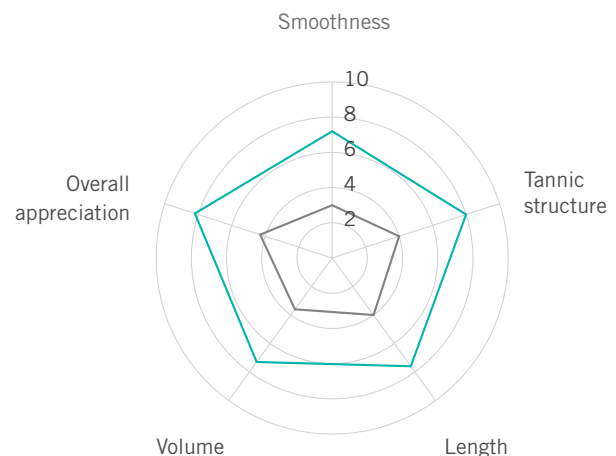
Control Manno'Sense®



After treatment with Subli'Sense®

20 cL/hL before bottling
Côtes-du-Rhône • Shiraz • 2019

Control Subli'Sense®



SUBLI'SENSE®, improves the mouthfeel and flavour of wines without weighing down the mid-palate.

VINOPROTECT®

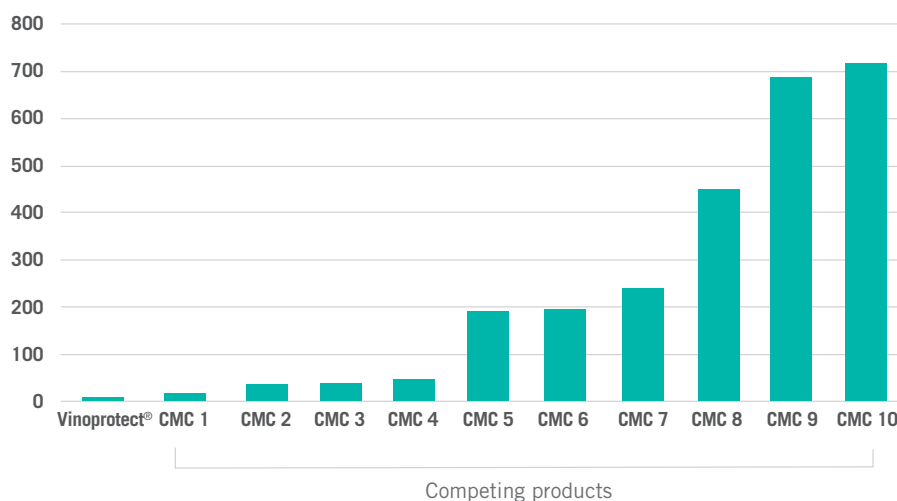
Cellulose gum for white and rosé wines stabilisation regarding the risk of precipitation of potassium bitartrate.

In addition to its remarkable effectiveness, Vinoprotect® allows you to save preparation time, to reduce the risk of filter clogging and any risk of over- or under-rate in the final product.

TO KNOW

Vinoprotect® is a product with a very low viscosity, it is actually a liquid solution which is both **easy to use, to mix** in the tanks, and **well adapted to in-line injection** using a dosing pump.

CMC viscosity, for 5% concentrations



DOSAPOMPE

Dosapompe is an in-line injection system for liquid enological products, specially designed for automatised in-line continuous injection.

It allows **any type of liquid product** to be safely added to the wine, even the most viscous, such as arabic gum, cellulose gum, liquid SO₂, enzymes...

BENEFITS

- ◆ Avoids loss of product and premature clogging of filter cartridges
- ◆ Guarantees the hygiene and entire integrity of the product and the wine since the product is injected directly from the container
- ◆ Easy cleaning and in-line disinfection through a completely automatised programme
- ◆ Ensures perfect traceability thanks to a management system for batches and volumes



PRODUCT	PRODUCTION LINE RATE	DOSAGE RATE	DOSAGE PRECISION	MAX. PRESSURE PUT ON LINE	WORKING TEMPERATURE
Dosapompe 100-20	Up to 10 000 bottles/h	Up to 20 liters/h	+/- 3% with calibration	4 bars	5 to 60°C (resistant to steam)
Dosapompe 200-50	Up to 20 000 bottles/h	Up to 50 liters/h		7 bars*	

*Compatible with counter-pressure bottling line.



"The arabic gum offered by Lamothe-Abiet meets our quality expectations in terms of wine stabilisation and roundness.

After obtaining good results, we decided to install a dosapump to facilitate in-line mixing."



THOMAS TROULAY, WINE DIRECTOR
VIGNERONS DE PUISSEGUIN, LUSSAC SAINT-EMILION, FRANCE

ARABIC GUMS & MANNOPROTEINS			STABILISATION				TYPE OF WINE	DOSAGE*
			COLLOIDAL	COLOUR	ROUNDNESS	FILTERABILITY		
ARABIC GUM	VINO'GOM®	L	●	●	●	●	● ● ●	5 - 30 cL/hL
MANNOPRTEINS & GUMS	SUBLI'SENSE®	L	● + tartaric	●	●	●		10 - 30 cL/hL
	MANNO'GOM®	P	● + tartaric	●	● + sucrosity	●		5 - 30 g/hL
MANNOPROTEINS	MANNO'SENSE®	L	● + tartaric	●	● + sucrosity	●		2,5 - 15 cL/hL

TARTRIC STABILISATION			STABILISATION			TYPE OF WINE	DOSAGE*
			TARTARIC	EFFECTIVENESS OVER TIME	INTERACTIONS WITH PROTEINS		
CMC	VINOPROTECT®	L	●	●	●	● ● ●	10 - 40 cL/hL
MANNOPROTEINS	STAB K®		●	●		● ● ●	≤ 40 cL/hL

MICROBIOLOGICAL STABILISATION			STABILISATION				TYPE OF WINE	DOSAGE*
			BRETTANOMYCES	ACETIC BACTERIA	LACTIC BACTERIA	YEASTS		
CHITOSAN	KILLBRETT®	P	●		●		● ● ●	2 - 10 g/hL
SO ₂	COEFF 2 AND 5 G	E	●	●	●	●		According to objectives

CHARCOALS			STABILISATION		TYPE OF WINE	DOSAGE*
			COLLOIDAL / COLOUR	AROMATIC		
CHARCOALS	GÉOSPRIV	P G		● + decontaminating	● ● ●	20 - 100 g/hL before end of FA
	SUPER ULTOSE	P G	● + color removal			≤ 100 g/hL

L Liquid
G Granulated
P Powder
E Effervescent tablets

*Guidelines only: carry out trials to determine the optimal dosage for each type of wine. Respect the maximum authorized dosages according to the current regulations.



SPARKLING WINES

Lamothé-Abiet has developed a range of specialised products for the production of sparkling wines. These are equally suitable for winemaking using the "traditional method" as for in closed tanks (Charmat method).

For the alcoholic fermentation of base wines and the secondary fermentation, we have selected 5 strains of yeast to achieve the different desired wine profiles:

BASE WINE

EXCELLENCE®

Rosé

- ◆ Clean and precise profile (no aromatic masks)
- ◆ Aromatic intensity and freshness (white flowers, stone fruits)
- ◆ On the palate: vivacity, L-malic acid preserved

EXCELLENCE®

TXL

- ◆ Revelation of volatile thiols
- ◆ Box-tree, citrus and tropical fruits
- ◆ Perfect balance: volume, complexity and aromatic finesse

EXCELLENCE®

STR

- ◆ Revelation of fermentary esters
- ◆ Stone fruit and tropical fruit notes
- ◆ Aromatic complexity

BASE WINE & SECONDARY FERMENTATION

EXCELLENCE®

E2F

- ◆ The most robust yeast
- ◆ Aromatic purity
- ◆ Resistant to pressure and difficult environments
- ◆ Good bubbles quality

L.A.

SPUMANTE

- ◆ The best adapted yeast for producing sparkling wines in closed tanks (Charmat).
- ◆ Produces aromatic, easy-drinking wines
- ◆ Floral and fruity notes

L.A. SPUMANTE

A new yeast!

NEW

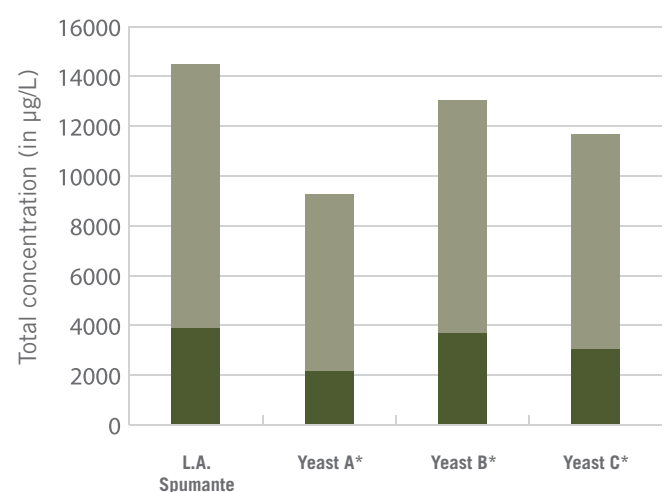
The best adapted yeast for producing sparkling wines in closed tanks (Charmat).

L.A. Spumante is a particularly robust yeast for **safe** and **optimal production** of sparkling wines. It can ensure the alcoholic fermentation of base wines, and the secondary fermentation of sparkling wines without **producing undesirable compounds**, even in difficult conditions with high pressure (6 bars). It also helps to **reveal intense fruity** and **floral aromas**. **L.A. Spumante** ensures the production of aromatic, easy-to-drink wines.

- Concentrations of esters and acetates (Fruity) (µg/L)
- Phenylethanol (Floral) (µg/L)

*Market benchmarks for the production of sparkling wines.

Aromatic profile of L.A. Spumante





FINING

			DECREASES BITTERNESS	TREATING COLOUR	DECREASES GREEN NOTES	TREATING OXIDATION	DOSAGE
Pea protein (GREENFINE MUST L: Liquid)	GREENFINE MUST	P	•	•	●	●	10 - 50 g/hL L : 10 - 50 cL/hL
Pea protein, inactivated yeast, calcium bentonite	GREENFINE NATURE	P	●	•	●	•	10 - 80 g/hL
Pea protein, decolouring activated carbon, PVPP, calcium bentonite	GREENFINE INTENSE	P	•	●	•	●	10 - 120 g/hL

FERMENTATIONS

	STRAIN	BASE WINE	SECONDARY FERMENTATION	NITROGEN REQUIREMENT	ALCOHOL RESISTANCE (%Vol)
EXCELLENCE YEASTS	NEW ROSÉ	●		Medium	16
	TXL	●		Medium	16
	STR	●		Medium	15
	E2F	●	●	Low	> 17
L.A. YEASTS	NEW SPUMANTE	●	●	High (> 240 mgN/L)	14,5

DISGORGING & DOSAGE

			COMPONENTS	DOSAGE
ARABIC GUM & MANNOPROTEINS	VINO GOM	L	Liquid <i>acacia vereke</i> gum (coating) to increase mouthfeel	5 - 30 cL/hL
	SUBLI'SENSE		Acacia gum and mannoproteins in solution to enhance the mid-palate and balance bitterness	10 - 30 cL/hL
	MANNO'SENSE		Pure mannoproteins, rich in HSP12 sapid peptide	2,5 - 15 cL/hL
	MANNO'GOM	P	Mannoproteins and acacia gum powder to enhance sucrosity and reveal fruity notes	5 - 30 g/hL

TANNINS	SOFTAN SWEETNESS		Lightly toasted oak tannins combined with arabic gum	1 - 3 g/hL
	SOFTAN FINITION		Medium toasted oak tannins combined with arabic gum	
	TAN&SENSE VOLUME	P	Untoasted oak tannins	0,5 - 3 g/hL
	TAN&SENSE ORIGIN		Lightly toasted oak tannins	
	TAN&SENSE EXPRESSION		Medium toasted oak and grape tannins	
	TAN&SENSE FORTE		Strongly toasted oak tannins	

L Liquid G Granulated P Powder MG Micro-Granulated

ŒNOBOIS

AU CŒUR DU VIN

Located in Bordeaux for over 20 years, Œnoboïs® produces oak for enology. Our synergy with Lamothe-Abiet, which has been working with winemakers since 1878, gives us in depth knowledge of winemaking and the profiles our customers desire.

Œnoboïs® offers you a wide range of oak carefully selected to meet your production goals.



STAVES & BLOCKS

• Œnoboïs® offers a range of thick French oak staves, designed for long ageing of "vin de garde" (6 to 10 months). Our specific «double toasting» process gives us the ability to produce highly complex, varied and repeatable profiles.

• Blocks are based on our thick staves for slightly shorter maturation periods (2 to 4 months).

• Œnoboïs® Staves & blocks ensure the gradual and stable extraction of oak components while respecting the terroir typicity of the wines produced.

ORIGIN	EXPRESSION	ABSOLUTE
		
TYPE OF TOAST	TYPE OF TOAST	TYPE OF TOAST
  	  	  
- Lightly toasted French oak. - Enhances the typicity of terroir wines without adding toasted notes. - Adds softness and volume on the palate. - For fresh, balanced white, rosé and red wines.	- Medium-toasted French oak. - Delicious and complex aromatics, with subtle notes of vanilla, caramel and crème brûlée. - Adds sucrosity and length on the palate. - For fresh white, rosé and red wines.	- Strongly toasted French oak. - Brings finesse and aromatic freshness with mineral and fresh spice notes. - Adds tension and length on the palate. - For ripe white, rosé and red wines that lack freshness.
  	  	  
Red berries	Vanilla	Mineral
Yellow fruits	Crème brûlée	Smokey
Coconut	Caramel	Pepper

STICKS INSIDE

Ænobois® Sticks Inside range made from French oak aims to extend the life of your old barrels.

Our Sticks Inside are made of a chain of 12 segments to be inserted into your barrel. It is estimated that adding one 12 segment chain gives the effect of using ± 30% new 225L barrel. Different profiles are available, from light toasting that respects the fruit, to medium to strong toasting that have a greater impact on the aroma profile, depending on the desired objectives.



STICKS & 3D

• Ænobois® offers a range of 22mm thick French oak sticks for long maturation (6 to 10 months). The unique format of the Ænobois® stick gives a deeper extraction of the oak compounds to go even further in the search for intensity, aromatic persistence and

tannic concentration on the palate.

• The 3D cubes, made from our sticks quality oak, are designed for slightly shorter maturation periods (2 to 4 months).



HIGHLIGHT

TYPE OF TOAST



- ◆ Lightly toasted French oak.
- ◆ Enhances the intensity of the varietal fruit flavours without adding toasty notes.
- ◆ Adds structure and tannic concentration.
- ◆ For fresh white, rosé and red wines that lack body on the palate.



Red berries



Yellow fruits



Coconut



MEDIUM

TYPE OF TOAST



- ◆ Medium-toasted French oak.
- ◆ Brings out very intense patisserie notes.
- ◆ Adds sucrosity and tannic concentration.
- ◆ For "under-ripe" white, rosé and red wines that lack body on the palate.



Vanilla



Pastry



Caramel



MEDIUM PLUS

TYPE OF TOAST



- ◆ Strongly toasted French oak.
- ◆ Intense notes of smoke, coffee and mocha.
- ◆ Concentrated tannins and persistent aromas on the palate.
- ◆ For ripe or overripe white, rosé and red wines that lack length on the palate.



coffee



Mocha



Tiramisu

A NEW CHIP HAS ENRICHED THE RANGE!

Œnoboïs® offers a complete range of French and American oak chips with specific organoleptic characteristics, to work on both the wines' aromatic expression and on their balance on the palate.



For 2024, discover the new chip in the Œnoboïs® range, the TOFFEE: a medium-toasted oak chip from 100% French oak.

TOFFEE

TYPE OF TOAST



Coconut



Vanilla



Sucrosity

◆ Goal of an addition of 2g/L during vinification: adding sucrosity on the attack and increase the intensity of fruity notes.

◆ Goal of an addition of 3–5 g/L during maturation: adding intense notes of whisky lactone and vanilla whilst adding strong sweetness on the palate.

◆ For white, rosé and red wines that lack sweetness.
◆ To soften the 'tougher' tannins of concentrated red wines, as well as the dry tannins produced during very hot and dry vintages.



MAKE THE BEST CHOICE OF OENOLOGICAL OAK WITH OUR DECISION-MAKING TOOL:



Available on our Œnosolutions application, downloadable from AppStore & Google Play Store.



Also available on our new website:

WWW.OENOBOIS.COM





STAVES & BLOCKS, STICKS & 3D		AROMATIC BALANCE					BALANCE ON THE PALATE				RECOMMENDATIONS
		RESPECTS & ENHANCES FRUIT NOTES	NOTES OF COCONUT & WHISKY LACTONE	COMPLEX & GOURMAND Vanilla, crème brûlée, caramel	AROMATIC INTENSITY & PERSISTENCE Mocha, coffee	FINESSE & FRESHNESS Minerality	TANNIC STRUCTURE	SUCROSITY (Attack on the palate)	OVERALL VOLUME (Middle)	LENGTH & FRESHNESS (Finish)	
STAVES 900x50x18mm BLOCKS 150x50x18 mm	Origin	●	●			●	●	●	●	●	Application during AF ensures better integration with the wine. Using during maturation, after MLF, brings out the full aromatic complexity of the selected oak. Contact time: • Stave: 6 to 10 months. • Blocks: 2 to 4 months. • Sticks: 6 to 10 months. • 3D: 2 to 4 months.
	Expression	●	●	●			●	●	●	●	
	Absolute	●				●	●	●	●	●	
STICKS 900x22x22 mm 3D 22x22x22 mm	Highlight	●	●			●	●	●	●	●	
	Medium		●	●			●	●	●	●	
	Medium +			●	●		●	●	●	●	

STICKS INSIDE
(For barrels)

INSERT 12 segments of 300x22x22 mm	Highlight	●	●			●	●	●	●	It is estimated that adding one 12 segment chain gives the effect of using ± 30% new 225L barrel. Dosage: 1 to 3 chains per 225L barrel. Contact time: 4 to 10 months.
	Medium		●	●			●	●	●	
	Medium +			●	●		●	●	●	

CHIPS & GRANULARS		AROMATIC BALANCE				BALANCE ON THE PALATE				RECOMMENDATIONS
		RESPECTS & ENHANCES FRUIT NOTES	NOTES OF COCONUT & WHISKY LACTONE	VANILLA AND GOURMET NOTES	TOASTED AND SPICY NOTES	TANNIC STRUCTURE	SUCROSITY (Attack on the palate)	VOLUME & ROUNDNESS (Middle)	LENGTH (Finish)	
CHIPS	FR	Fresh	●	●			●		●	Using during AF ensures better integration with the wine. Using during maturation, after MLF, brings out the full aromatic complexity of the selected oak. Dosage: 1 to 5 g/L depending on objective. Contact time: 1 to 3 months.
		Light	●	●			●		●	
		Toffee	●	●	●		●	●	●	
		Medium			●	●	●	●	●	
		Medium +			●	●	●	●	●	
	US	Medium		●	●		●	●	●	
		Medium +		●	●		●	●	●	
	BLEND	Pure Fresh fruits	●	●			●	●		
		Fun Gourmet			●	●	●	●	●	
		Chic Toasted spicy			●	●	●	●	●	

GRANULARS	FR	CEnofresh®	●				●			The granular format allows the potential of the oak in the wine to be extracted quickly. This format is particularly adapted to use during the alcoholic fermentation. Application: immediately after filling the tank. Dosage: 1 to 5 g/L depending on the objective. AF contact time: 3 to 5 days.
		Fresh	●	●			●		●	
		Light	●	●			●		●	
		Medium			●	●	●	●	●	
	US	Medium			●	●	●	●	●	
	BLEND	Ferm'Oak	●	●	●	●	●	●	●	



VEGAN CERTIFICAT

DECLARATION ON HONNOR

We hereby confirm that all products and auxiliaries listed below, contain **no substances of animal origin**.

Furthermore, we confirm that for the production of the raw materials no processing aids of animal origin are being used. The substances **weren't tested on animals** (conducted or sponsoring directly by our company).

This is individually true for all substances (ingredient or auxiliary material), and for the final product.

PRODUCTS & AUXILIARY MATERIALS CONCERNED

All our products are concerned by this document, except these listed below*.

Information provided on this product information sheet is intended solely for internal use or for Vegan certification and hasn't to be send in other case.

*Products that couldn't be used with this document:

- Colle de poisson L.A.
- Gélatine spéciale vins fins
- Geldor®

LABELLING RULES

The new wine labelling rules came into force on 8 December 2023.

Our website provides a table to help you identify the labelling rules applied to Lamothe-Abiet products.

CONSULT THE TABLE:



Myriam POIRIER,
Quality Manager
le 08/04/2025

Protocols

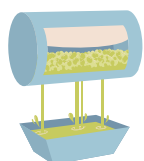
⚙️ AROMATIC OPTIMISATION



FERMENTARY ESTERS

Optimal turbidity = 50 – 100 NTU

Optimal AF temperature = 14-16°C



Pressing

Ænozym® Clair

Application: After pressing.

Benefits: ♦ Fast depectinisation of must in cold clarification or flotation



Settling tank

GreenFine® Range

Application: At settling.

Benefits: ♦ Clarification of must
♦ Removal of polyphenols
♦ Colour management



Fermentation tank

ÆnoStim®

Application: In rehydration water for the yeast.

Benefits: ♦ Optimised fermentation kinetics
♦ Better implantation of selected yeast
♦ Better revelation of aromas by yeast

Excellence® STR

Application: Yeast addition.

Benefits: ♦ Synthesis of fermentary esters
♦ Good fermentation kinetics

OptiEsters®

Application: At the end of the 1st third of AF.

Benefits: ♦ Stimulate synthesis of fermentary esters during AF

TO KNOW

The production of fermentary esters **depends directly on the strain of yeast used**. Certain enzymatic activities specific to the yeast are essential for an optimal **revelation** of acetate esters and ethyl esters of fatty acids. **Excellence® STR** was selected for this very reason.



THIOLS

Optimal turbidity = 150 – 200 NTU
Optimal AF temperature = 18°C

Harvest



CEnozym® Clair

Application: On fresh grapes as soon as possible.

Benefits:

- ◆ Depectinise must
- ◆ Extract aroma precursors



Settling tank

GreenFine® Range

Application: At settling.

Benefits:

- ◆ Clarification of must
- ◆ Removal of polyphenols
- ◆ Colour management



Fermentation tank

OptiThiols®

Application: After tank filling and clarification.

Benefits:

- ◆ Stimulates the synthesis of thiols during AF
- ◆ Better preservation of thiols after AF

CEnoStim®

Application: In rehydration water for the yeast.

Benefits:

- ◆ Optimised fermentation kinetics
- ◆ Better implantation of selected yeast
- ◆ Best revelation of aromas by yeast

Excellence® FTH / TXL

Application: Yeast addition.

Benefits:

- ◆ Reveal aroma precursors (4MSP, 3SH et A3SH)
- ◆ Good fermentation kinetics

CEnozym® Thiols

Application: Start of AF.

Benefits:

- ◆ Reveal volatil thiols (4MSP, 3SH et A3SH)

Optiflore® O

Application: After 1st third of AF.

Benefits:

- ◆ No effect on nitrogen catabolic repression
- ◆ Increased aromatic complexity

Aroma Protect®

Application: At the end of AF (density 1.010) or during maturation.

Benefits:

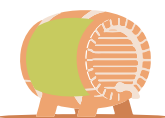
- ◆ Protection of thiol aromas thanks to high concentration in glutathione

CEnozym® Thiols

Application: During ageing.

Benefits:

- ◆ Liberation of volatils thiols (4MSP, 3SH)



Ageing

TO KNOW

The B-Lyase enzymatic activity of the yeast frees 10 to 15% of volatil thiols from cysteinyl and glutathionyl precursors during AF. This leaves a dormant aromatic potential that can be exploited during maturation. The use of a pectolytic enzyme such as **CEnozym® Thiols** will help to release remaining thiols still available in the wine, and maximize the aromatic potential of white and rosé wines.



ON WHITE & ROSÉ WINES

Harvest



Excellence® B-Nature

Application: On fresh grapes, as soon as possible.

Benefits:

- ◆ Control of microbial flora
- ◆ Reduction of compounds that combine SO₂
- ◆ Consumes dissolved oxygen

Aroma Protect®

Application: On fresh grapes, as soon as possible.

Benefits:

- ◆ Consumes dissolved oxygen
- ◆ Reacts with quinones

Tanin gallique à l'alcool

Application: On fresh grapes, as soon as possible.

Benefits:

- ◆ Inhibition of oxidases (tyrosinase, laccase)



Settling tank

GreenFine® Range

Application: At settling.

Benefits:

- ◆ Decrease oxidised and oxidisable compounds



Fermentation tank

Excellence® ROSÉ / FTH / TXL

Application: Yeast addition.

Benefits:

- ◆ Low production of SO₂ and compounds that combine SO₂

Vitaferment® PH / Optiflore® O

Application: During AF.

Benefits:

- ◆ Meets the nitrogen needs of yeast
- ◆ Optimisation of selected yeast metabolism

Aroma Protect®

Application: At the end of AF (if MLF not desired) or MLF.

Benefits:

- ◆ Consumes dissolved oxygen
- ◆ Reacts with quinones



ON RED WINES

Harvest



Excellence® B-Nature

Application: On fresh grapes, as soon as possible.

Benefits:

- ◆ Control of microbial flora
- ◆ Reduction of compounds that combine SO₂
- ◆ Consumes dissolved oxygen

Tan&Sense® Volume

Application: On fresh grapes, as soon as possible.

Benefits:

- ◆ Consumes dissolved oxygen
- ◆ Protects grape tannins and anthocyanins

Pro Tannin R®

Application: On fresh grapes, as soon as possible.

Benefits:

- ◆ Inhibition of oxidases (tyrosinase, laccase)
- ◆ Grapes tannic potential preservation
- ◆ Colour preservation



*Fermentation
tank*

Excellence® XR / SP / DS / FR

Application: Yeast addition.

Benefits:

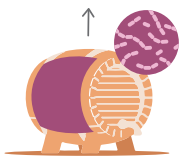
- ◆ Low production of SO₂ and compounds that combine SO₂

Vitaferment® PH / Optiflore® 0

Application: During AF.

Benefits:

- ◆ Answer to yeast nitrogen requirements
- ◆ Optimisation of selected yeast metabolism



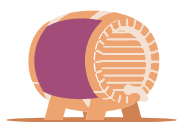
*Malolactic
fermentation*

Œno 1®

Application: Œno 1 : 24 to 48 hours after the start of AF.

Benefits:

- ◆ Shorten the gap between AF and MLF through controlled inoculation: limit microbial contamination and oxidations



Ageing

Killbrett®

Application: After FML.

Benefits:

- ◆ Eliminate *Brettanomyces* populations (Killbrett®)
- ◆ Reduce populations of lactic bacteria and non-*Saccharomyces* yeasts (Killbrett®)

Tan&Sense® Volume / Tan'Excellence® / Softan® Power

Application: After FML.

Benefits:

- ◆ Consumes dissolved oxygen
- ◆ Protects grape tannins and anthocyanins
- ◆ Colour stabilisation

EXTRACTION & STABILISATION OF COLOUR MATTER



ON RED WINES

Harvest



ĈEnozym® Crush

Application: On grapes.

Benefits:

- ◆ Extraction of beneficial phenolic compounds
- ◆ Increasing colour and its stability
- ◆ improving filterability

Pro Tannin R®

Application: On grapes.

Benefits:

- ◆ Fast reaction with must proteins
- ◆ Keep beneficial phenolic compounds
- ◆ Inhibit laccase when *Botrytis cinerea* is present on grapes (refer to *Botrytest* to modulate the dosage)



Fermentation tank

Excellence® XR / DS

Application: Yeast addition.

Benefits:

- ◆ High production of polysaccharides during AF, contributing to stabilisation of wines
- ◆ Steady fermentation kinetics that enable optimal extraction of phenolic compounds

Softan® Vinification

Application: Beginning of AF.

Benefits:

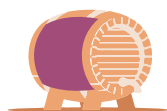
- ◆ Catechic tannin that is highly reactive with ethanal enabling specific anthocyanins to be stabilised
- ◆ Better colour stability
- ◆ Brings structure and balance to wine profile

Natur'Soft®

Application: Beginning of AF.

Benefits:

- ◆ Autolysed yeasts rich in polysaccharides that fix colour during the alcoholic fermentation
- ◆ Adds volume and roundness on the palate



Ageing (end of fml)

Tan'Excellence®

Application: End of FML.

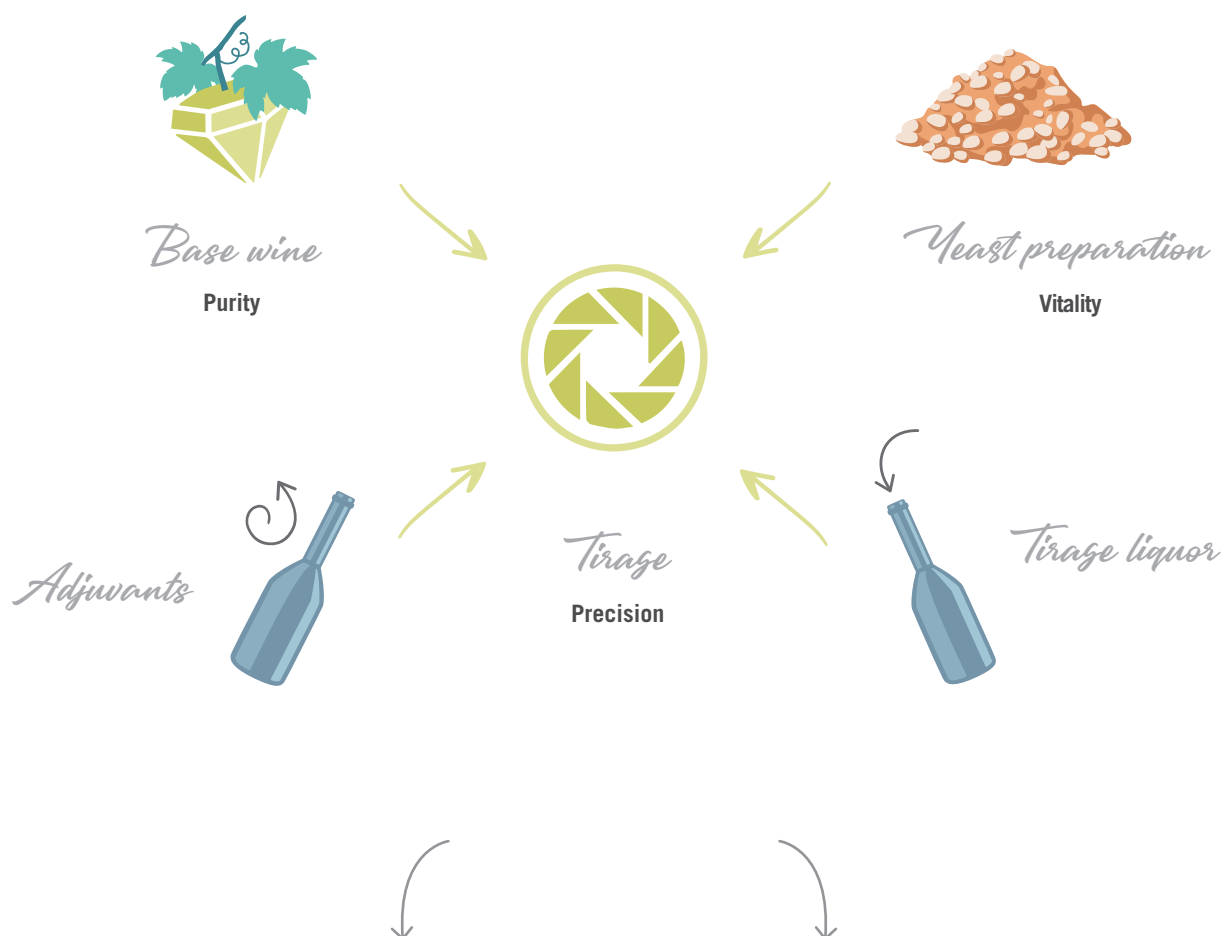
Benefits:

- ◆ Stabilise colour thanks to its formulation rich in catechic tannins
- ◆ Manage oxidation thanks to ellagic tannins

⚙️ SPARKLING WINES



SPARKLING WINE: THE BASICS



TRADITIONAL METHOD

Second fermentation / Maturation

- ◆ Precision

Ridding

- ◆ Clarification

Disgorging

- ◆ Cleanness

Disgorging liquor addition

- ◆ Finalisation

CHARMAT METHOD

Second fermentation / Maturation

- ◆ Precision

Stabilisation / Filtration

- ◆ Clarification

Disgorging liquor addition

- ◆ Finalisation

Isobarometric bottling

- ◆ Bottling

SPARKLING WINES



BASE WINES PROCESS

Optimal turbidity = 100 - 150 NTU

Optimal AF temperature = 15 -17°C



Pressing

Enozym® Clair

Application: When filling tank.

Benefits:

- ◆ Rapid depectinisation of must in cold sedimentation or flottation



Settling tank

GreenFine® Range

Application: At settling.

Benefits:

- ◆ Must clarification
- ◆ Polyphenol removal
- ◆ Colour management



Fermentation tank

EnoStim®

Application: In yeast rehydration water.

Benefits:

- ◆ Optimised fermentation kinetics
- ◆ Better implantation of selected yeast

Excellence E2F® / ROSÉ / STR / TXL / L.A. SPUMANTE

Application: Yeast addition.

Benefits:

- ◆ The strongest yeast, to reach aromatic purity

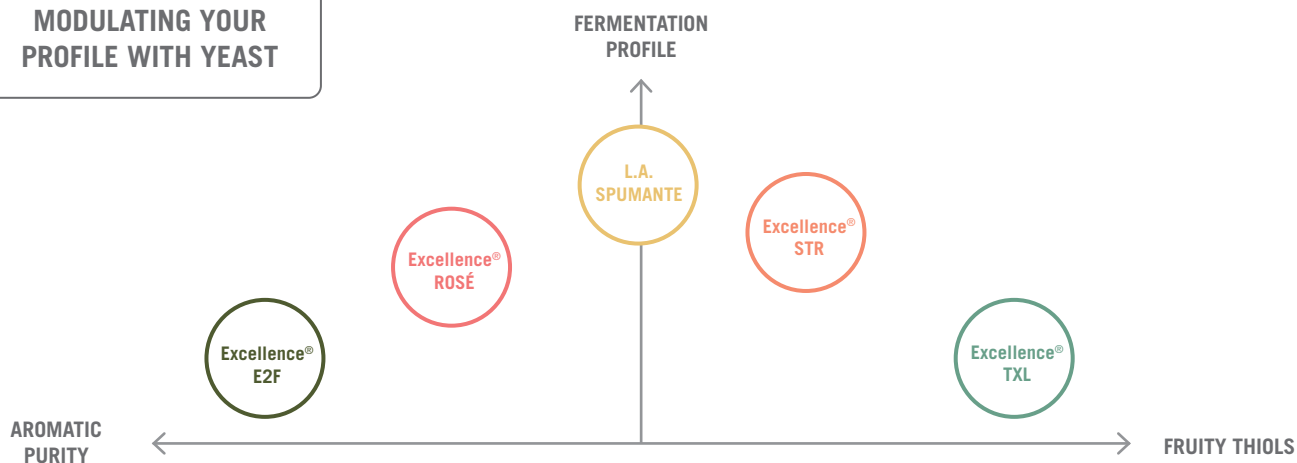
OptiFlore® 0

Application: After one third of the AF.

Benefits:

- ◆ High quality yeast nutrition, limits appearance of reductive aromas

MODULATING YOUR PROFILE WITH YEAST





SECOND FERMENTATION & BOTTLING



Excellence E2F® / L.A. SPUMANTE

Application: In the tirage liquor.

Benefits: ♦ Resistant to alcohol, pressure, and difficult conditions, produces a high quality mousse

Tannin E2F®

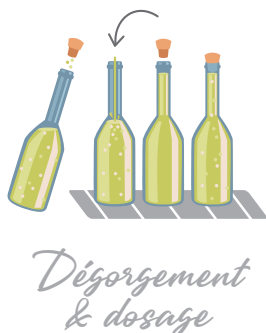
Application: In the tirage liquor.

Benefits: ♦ Antioxidant
♦ Causes unstable proteins to precipitate
♦ Brings elegance and structure

Bentosol Protect

Application: Riddling adjuvant for traditional method.

Benefits: ♦ Optimum yeast clarification, forms a compact deposit



Vinogom® / Subli'Sense® / Manno'Sense® / Manno'Gom®

Application: At disgorging / dosage.

Benefits: ♦ Adds roundness, sucrosity, aromatic persistence

Softan® Finition / Gamme Tan&Sense®

Application: At disgorging / dosage.

Benefits: ♦ Adjust your wine profile to market demands, mitigates bitterness

TO KNOW

SO₂ can seriously perturb the secondary fermentation. The active SO₂ content must be less than 1.5 mg/L. It is important to avoid any sulphite additions less than 15 days before bottling.

Use our CEnosolutions mobile application to calculate your active SO₂ at any time and optimise your sparkling wine production:



ÆnoSolutions

A turnkey tool

Discover Ænosolutions, Lamothe-Abiet's mobile app available on Android and IOS.

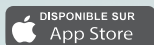
User-friendly, this app features enological calculators, such as **SULPHITING**, **ACIDITY MANAGEMENT** or **ÆNOLOGICAL AUXILIARIES MANAGEMENT**.

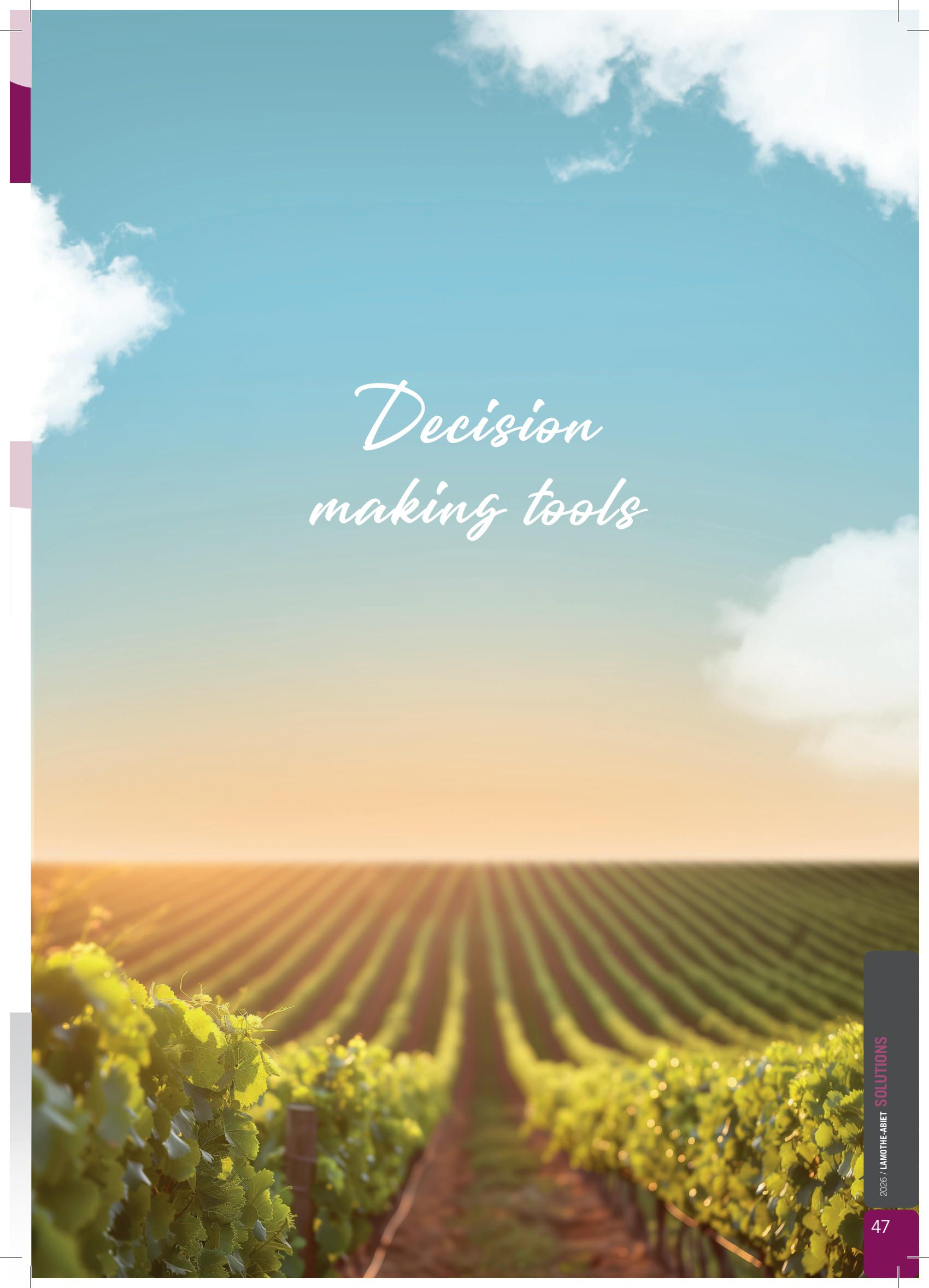
USING A VIRTUAL ASSISTANT,
ÆNOSOLUTIONS HELPS YOU TO MANAGE:

- YEAST NUTRITION 
- ALCOHOLIC FERMENTATION 
- SECOND FERMENTATION 
- MALOLACTIC FERMENTATION 
- CHOICE OF ENOLOGICAL OAK 



ÆNOSOLUTIONS IS AVAILABLE ON:





Decision making tools



FINING : FIND YOUR SOLUTION

UNBALANCED DUE TO ASTRINGENCY

MEDIUM TO HIGH IN TANNINS

Polymix® Natur' : 30-80 g/hL
GreenFine® X-PRESS : 30-80 g/hL

LOW IN TANNINS

Geldor® : 1,5-4 g/hL
GreenFine® Nature : ... 10-20 g/hL
Natur'Fine® Prestige : 20-40 g/hL

OTHER CAUSES OF IMBALANCE

Treat the cause of imbalance
ex: lack of sweetness

- > ... Subli'Sense®, Manno'Sense®,
- > Softan® Sweetness
ex: lack of roundness / volume
- > ... Vinotaste®Pro + works on lees



FINISHING

HIGH IN TANNINS

Gélatine spéciale vins fins : 5-10 cL/hL
GreenFine® X-PRESS : 30-80 g/hL

MEDIUM IN TANNINS

Geldor® : 3-8 cL/hL
Gélatine spéciale vins fins : .. 4-8 cL/hL
GreenFine® Nature : 20-30 g/hL

LOW IN TANNINS

Geldor® : 1,5-4 cL/hL
Gélatine spéciale vins fins : .. 2-4 cL/hL
Natur'Fine® Prestige : 10-30 g/hL

EXCESS OF POLYPHENOLS

SECONDARY OXYDATION

Polymix® Natur' : 40-80 g/hL
GreenFine® Must : 10-50 g/hL
GreenFine® Nature : ... 30-50 g/hL

BITTERNESS, ASTRINGENCY

Polymix® Natur' : 40-80 g/hL
GreenFine® Rosé : 10-50 g/hL

COLOUR MANAGEMENT

GreenFine® Intense : 40-120 g/hL
GreenFine® Rosé : 30-80 g/hL
GreenFine® Nature : ... 30-50 g/hL



FINISHING

Colle de poisson LA : 0,5-1,5 g/hL
Gélatine spéciale vins fins : .. 1-3 cL/hL
Geldor® : 1,5-3 cL/hL
Natur'Fine® Prestige : 10-30 g/hL
GreenFine® Nature : 10-30 g/hL

BRIGHTNESS

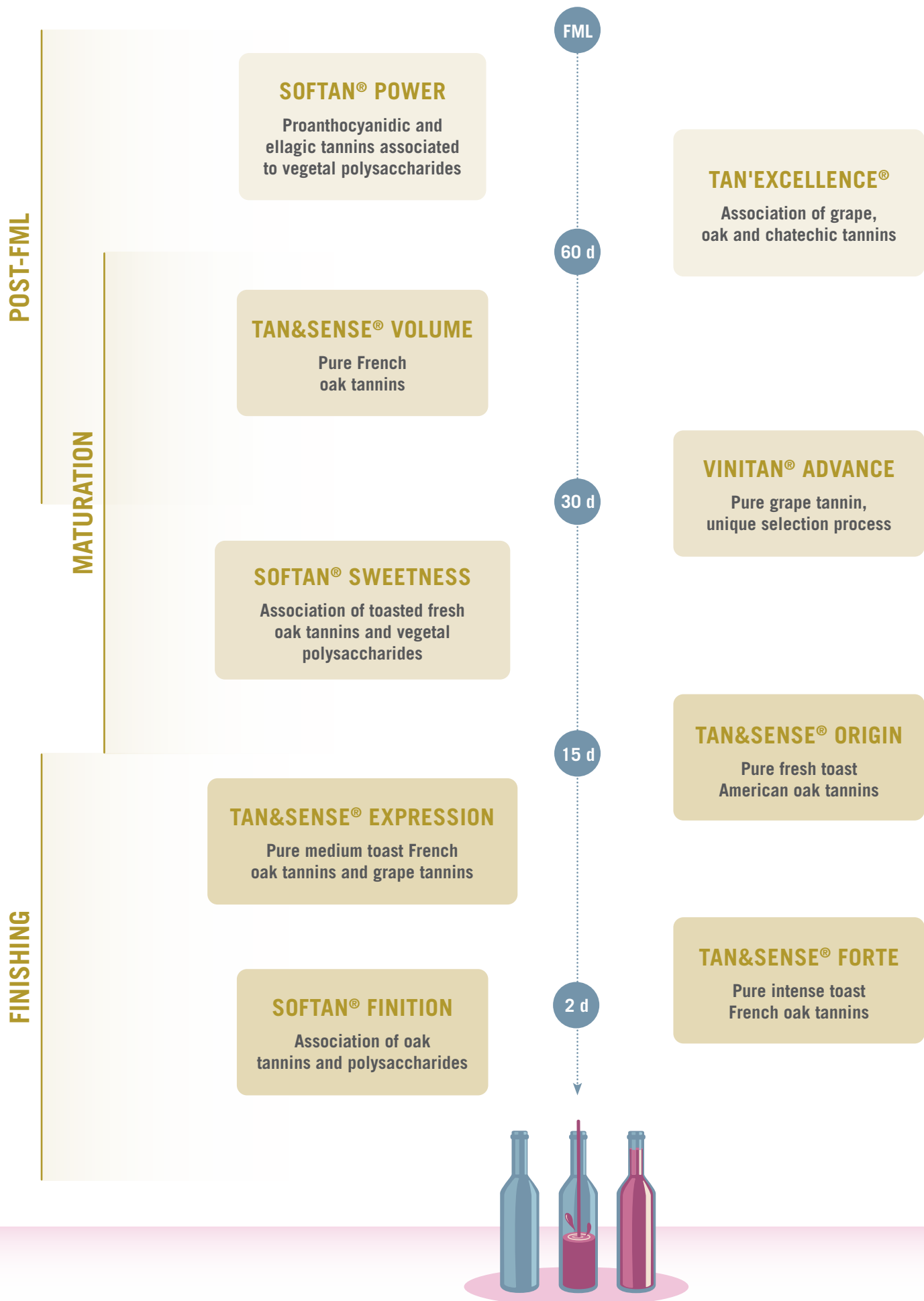
Colle de poisson LA : 1-3 g/hL
Gélatine spéciale vins fins : .. 3-5 cL/hL

PROTEIN STABILITY

Bentosol FT (tangential)
Dosage to be determined by heat test



AGEING TANNINS: FIND YOUR SOLUTION





TARTARIC STABILISATION: FIND YOUR SOLUTION

Clarity and the absence of deposits are essential for white, rosé, and red wines. Therefore, stabilisation is a crucial step.

Lamothé-Abiet provides specific solutions to obtain tartaric, protein and aromatic stabilisation in wines, whilst respecting their organoleptic characteristics.

What is tartaric precipitation?

Tartaric acid is the acid with the highest concentration in grapes. When the concentration is too high (saturation) in musts or wines, it precipitates during the vinification or storage. The crystals (tartar, potassium bitartrate or KHT) can then be seen at the bottom of the bottle. Although these crystals do not affect the organoleptic qualities of the wines, **many consumers reject wines that contain them,**



thinking that they are a fault. Tartaric acid is found in equilibrium in wines in the form of two salts: potassium hydrogen tartrate (KHT) and neutral calcium tartrate (CaT). These salts have specific solubilities which vary according to the **temperature**, the **pH** and the **alcohol content**. If the amount of KHT or CaT are greater than the solubility limit at a given temperature, there is therefore the risk of “**precipitation**”.

Tartar crystal precipitation in 2 steps

NUCLEATION (KHT / CaT)

Complexation of tartaric acid with potassium bitartrate or calcium tartrate.



GERM ENLARGEMENT

Formation of crystals.



PRECIPITATION

Appearance of crystals that are visible to the naked eye.

INHIBITION OF NUCLEATION

KHT



STAB K®

Mannoproteines

◆ Dosage : 5 - 20 cL/hL



VINOPROTECT®

CMC

◆ Dosage : ≤ 40 cL/hL

BLOCK GERM GROWTH



ANTITARTRE 40

Metatartaric acid

◆ Dosage : 10 g/hL

PROMOTES CRYSTALLISATION

Crystals are quickly and fully formed, which can then be removed.



CREAM OF TARTAR + COLD

◆ Dosage : 4 g/L

LAMOTHE-ABIET

Solutions for winemaking



📍 Z.A. Actipolis,
23-25 avenue Ferdinand de Lesseps
33610 BORDEAUX-CANEJAN, FRANCE

☎ +33 (0)5 57 77 92 92

✉ contact@lamothe-abiet.com

🌐 www.lamothe-abiet.com



Blue H2O Filtration | BHF Technologies
4 Kingston Town Close, Oakleigh VIC 3166 Australia
P.: +61 (03) 9564 7029
info@bhftechnologies.com.au
www.bhftechnologies.com.au

