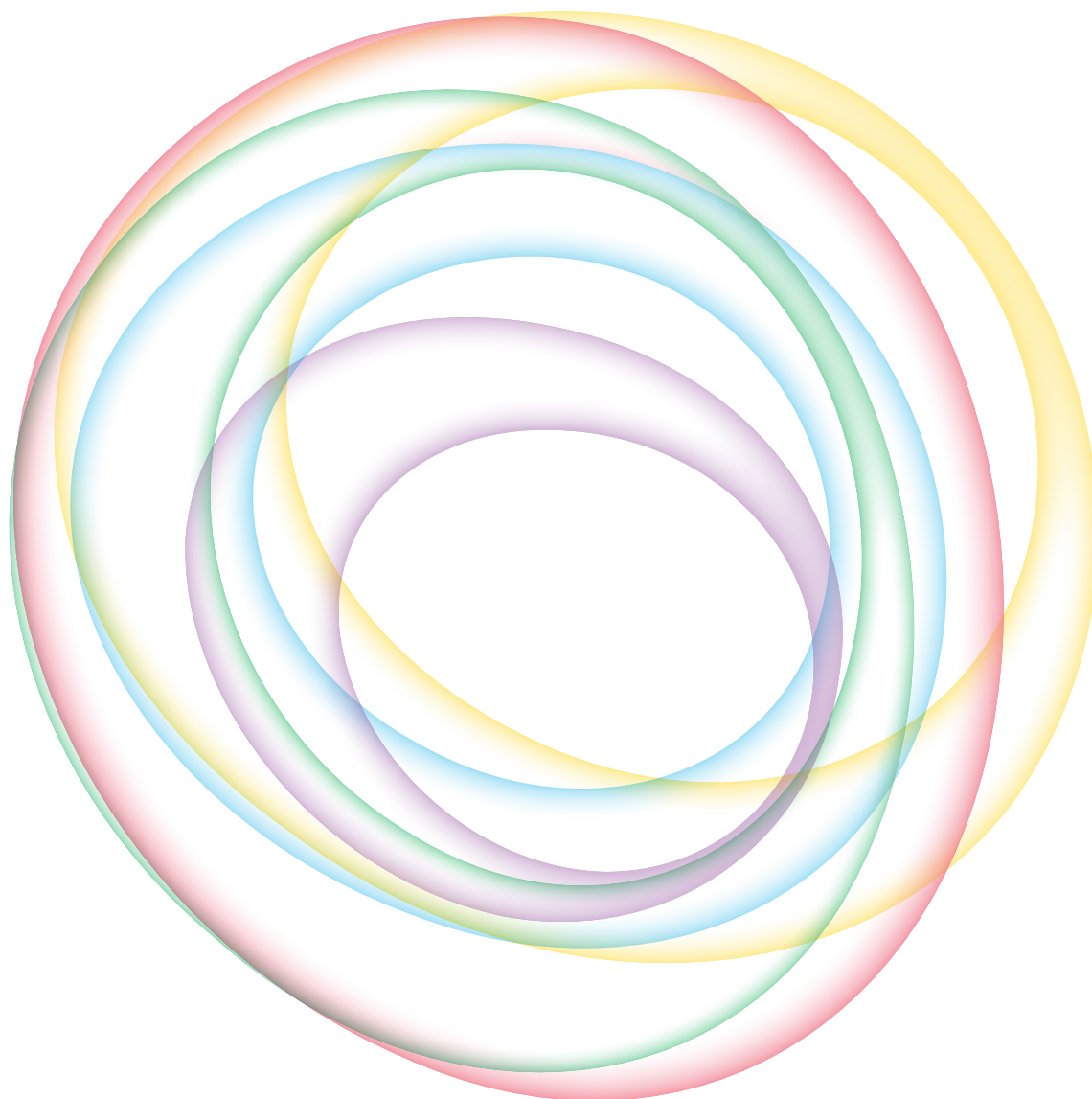




Perdomini-IOC oenology magazine:
2021 Harvest Special



2021 Harvest Special



New products in the Perdomini-IOC range

Once again, we are pleased to present some new products, confirming the success of the philosophy of research and innovation that has always set us apart.

Activit Safe™

Activit Safe™ is a 100% organic nutrient to be used at the two-thirds stage of alcoholic fermentation. It's made from a yeast autolysate with a high aminic-nitrogen content and yeast cell walls which adsorb the inhibitory toxins that can accumulate during fermentation. Activit Safe™ allows the yeast populations to activate their sugar-consuming metabolisms and to limit the stress they suffer as a result of the accumulation of toxic substances.

La Claire eXtase

Yeast isolated from Sauvignon Blanc grapes in the Bordeaux region. Distinguished by its ability to strongly enhance the strength of aromas – in particular citrusy notes, which provide a very pleasant sense of freshness on the nose and in the mouth. With adequate nitrogen-rich nutrition and low-temperature fermentation, La Claire eXtase facilitates the development of a fruity aromatic profile (esters/acetates), while at higher average temperatures it encourages the development of very intense thiol and citrus aromas.

Fullprotect

This blend of tannins and yeast polysaccharides is effective thanks to the synergy between specific polysaccharides and tannins, which leads to effective preservation of colour, aromas and flavours in white and rosé wines. Performs a targeted action against oxidation at the pre-fermentation stages. Fullprotect is an effective alternative to using SO₂.

ultiMA Jump

Preparation made from 100%-soluble yeast mannoproteins which have been selected specially for their ability to improve white and rosé wines. UltiMA Jump is particularly effective at drawing out citrusy thiol notes, leading to intense freshness in the mouth. Our research has demonstrated the ability of ultiMA Jump to bring the structure of wines back into balance, reduce dryness and astringency, and increase the persistence of aromas and flavours.

Inofine V Mes

Liquid additive made from pea protein, for performing fining or flotation on must. Recommended as a preventive treatment for musts at high risk of oxidation, Inofine V Mes significantly increases resistance to oxidation, enhances sensory properties, reduces bitter tastes and eliminates vegetal or grassy notes from wines subject to oxidative browning.

Easy'Up

Liquid additive made from vegetable charcoal, pea protein and bentonite clay designed for use in flotation. Easy'Up performs a powerful action on browned/oxidized must, helps reduce the quantity of oxidized and oxidizable phenol compounds, facilitates clarification and helps create a more compact flotation cap.

Qi Fine Mes

Liquid additive made from fungal-origin chitosan and pea protein, for performing fining or flotation on white and rosé must. Thanks to the synergistic action of its components, Qi Fine Mes leads to quicker, more effective flocculation and sedimentation. Perfect for use in flotation, as it's easy to use and leads to swift detachment of solid particles from the liquid interface.

Qi Up XC Mes

Liquid additive made from chitosan, for performing fining or flotation on white and rosé must. This product is distinguished by its high surface density charge at the pH of the wine. This property gives it a high level of affinity and reactivity to suspended particles, which means that it produces rapid flocculation.

Lumyclean Plus

Stabilizer used to eliminate oxidized and oxidizable polyphenols from must and wine. When making white and red wines, it can be used both as a preventive and curative treatment in order to prevent oxidative degradation or to 'rejuvenate' oxidized wines. Lumyclean Plus also enhances the longevity of wines and significantly improves their colour when it has been affected by oxidation. Lumyclean Plus is also effective at reducing the riboflavin content of white and rosé wines, helping the winemaker avoid the so-called 'light-struck taste' phenomenon.

Lumyclean Rex

Blend of a special activated vegetable charcoal – selected for its high level of purity – and silica gel. Effective at very low doses and with short contact times, Lumyclean Rex is a special treatment for white and rosé wines that helps winemakers avoid the so-called 'light-struck taste' caused by the photoreduction of riboflavin (a photosensitive molecule) following exposure to natural or artificial light when the wine has been bottled in colourless glass. If the correct dosages are used, Lumyclean Rex does not alter the colour of rosé wines.



To avoid any kind of malnutrition... choose the menu that goes down best with your yeast!



Using yeast nutrients has become common practice and is considered essential by many in the winemaking industry to get the best sensory and technical characteristics out of the yeasts. Experience shows that malnourished yeasts not only fail to express the full potential of the characteristics the winemaker wants to give the wine, but also often trigger unwanted processes (production of off-flavours, acetaldehyde, etc.) so that they constitute a loss in terms of both the exploitation of the yeasts themselves and the value of the finished product. With this in mind, it's not difficult to see how important it is to choose the right nutrient(s) to optimize the performance of the inoculated yeasts. Numerous studies have shown that the kind of nutrition used leads to greater sensory differences in the wine than the strain of yeast!

Composition		Source of nitrogen		Amount of yeast assimilable nitrogen (mg/L) provided by dose of 40 g/hL		Ammoniacal nitrogen		Factors provided by yeast				Other	
		Organic nitrogen	Mineral nitrogen	Direct calculation	Theoretical calculation	Phosphates	Sulphates	Amino acids	Sterols and lipids	Minerals	Vitamins	Added thiamine	Cellulose
Yeast protectors	Ecobiol pied de cuve			na	na			na	•••	••••	••••		
	Ecobiol pied de cuve Arom			na	na			na	••••••	•••	••••		
Stimulation of sensory metabolism	Aromactivit 1	••••	•	38	53	ok		••••	••	•	••••	•••	••
	Aromactivit 2	••••	•	38	53	ok		••••	••	•	••••	•••	••
Organic nutrients	Activit O	••••••		17	45			••••••	•	•••	•••	•••	
	Extra PM	••••		12	31			••••	•	•••	•••		
	Activit Safe™	•••		8	20			•••	••	••	••		
Mixed nutrients	Activit	••	•••	52	53	x		•		••	••	••	
	Activit AD	••••	•••	57	68	x		•••		••	••	••	
	Ecobiol	••	•••	48	56	x	x	•		••	••		••
	Ecobiol Perlage	•••	••	36	42	x		••		••	••		
Detoxifiers	Cellclean			na	na			na	••	••	••		
Simple nutrients (minerals)	Fosfovit		•••••	84	84	x						•••	
	Fosfovit +		••••	76	76	x						•••••	•
	MinVit		••••	76	76	x	x					•••	•
	Phosphate Titres		••••	84	84	ok						•••••	

IOC oenological bacteria: to satisfy your senses.

In order not to compromise all the work done during the grape harvest and to complete the yeast action, IOC oenological bacteria are at the top of the range in winemaking applications. They make it possible to control processes by guaranteeing linearity in the desired taste-sensory characteristics of the wine. In the world of modern winemaking, being able to provide a fully linear product for a harvest season is a significant commercial strength and an additional guarantee for your buyers.



Sensory and technical features

Winemaking applications

Product type	IOC Inoflore	IOC Extraflore	IOC Maxiflore Satin	IOC Maxiflore Elite	IOC Inobacter	Extraflore Pure Fruit
	MBR (direct inoculation)	MBR (direct inoculation)	1-Step starter culture	1-Step starter culture	Standard (Pied de cuve)	MBR (direct inoculation)
Ease of use	••••	••••	•••	•••	••	••••
Co-inoculation	••••	••	••••	••	•	••••
Sequential inoculation	••	••••	••••	••••	••••	••••
Application parameters	Alcol 14%	Alcol 14%	Alcol 16%	Alcol 15,5%	Alcol 13,5%	Alcol 16,5%
	pH > 3,25	pH > 3,15	pH > 3,25	pH > 3,10	pH > 2,90	pH > 3,10
	SO ₂ tot < 60 mg/l	SO ₂ tot < 40 mg/l	SO ₂ tot < 60 mg/l	SO ₂ tot < 60 mg/l	SO ₂ tot < 60 mg/l	SO ₂ tot < 50 mg/l
	Temp > 18°C	Temp > 18°C	Temp > 18°C	Temp > 18°C	Temp > 16°C	Temp > 15°C
Polyphenol resistance	••	••	••••	••	-	••••
Aromatic complexity	••••	••••	••	••••	•••	•••
Diacetyl	None if in co-inoculation	Average	Very low	Important	Very low	Very low
Spicy	•	••••	••	••••	••••	•
Fruity	••••	••	•••	••	•••	••••
Roundness	••	•••	••••	•••	•••	•••
White wines	••••	••	••	••••	••••	••
Red wines	••••	••••	••••	••••	••	••••
Rosé wines	••	•	•	•	••	••
New wine	••••	•	•	•	••	••••
Sparkling wine base	•	•	•	•	••••	•

The Perdomini product range



= Products **AUTHORIZED** in the production of organic wines as required by Regulation (EU) N.2018/1584.

They can be directly allowed or allowed if obtained from organic raw materials, if available (products indicated with * / necessary request to Perdomini of specific declaration).



= Product with **BIO** certification.



O

OPTIMIZATION OF ALCOHOLIC FERMENTATION



Ecobiol Pied de Cuve Specially formulated fermentation regulator. When used during the rehydration of yeasts, it provides sterols and other vital components to aid yeast metabolism.



Ecobiol Pied de Cuve Arom Specially formulated fermentation regulator. When used during the rehydration of yeasts, it provides vital components allowing the yeast to fully express its potential for aromas and flavours.



CellClean 100% *Saccharomyces cerevisiae* yeast hulls with high detoxifying power. Cellclean yeast hulls absorb alcoholic fermentation inhibitors such as medium-chain fatty acids (hexanoic acid, octanoic acid and decanoic acid) and residue of plant protection products.

OEnocell A special fermentation regulator for use in all situations. It makes must less cloudy, regulates fermentation and enhances the potential of yeast.



Aromactivit 1 100% organic nutrient. When used just after adding the yeast to the must, it leads to an increase in the aroma-creating metabolic activities of the yeast, stimulating in particular the expression of fruity and floral notes.



Aromactivit 2 Composite nutrient which, when used 1/3 of the way through alcoholic fermentation, helps to increase and optimize the aroma-creating metabolic activities of the yeast.



Activit O An alcoholic fermentation nutrient, 100% organic with added thiamine. When used in yeast inoculation and 1/3 of the way through fermentation, it generates greater production of fruity and floral aromas and reduces the production of sulphur.



Activit Safe™ Activit Safe™ is a 100% organic nutrient to be used at the two-thirds stage of alcoholic fermentation. It's made from a yeast autolysate with a high aminic-nitrogen content and yeast cell walls which adsorb the inhibitory toxins that can accumulate during fermentation. Activit Safe™ allows the yeast populations to activate their sugar-consuming metabolisms and to limit the stress they suffer as a result of the accumulation of toxic substances.



Activit A fermentation activator, made up of ammonium salts, inactive yeast and thiamine. It generates organic and inorganic nitrogen and has a detoxifying effect, allowing the full aromatic expression of the yeast.



Activit AD Nutrient made up of organic and inorganic nitrogen (biammonic phosphate) and thiamine. Unlike conventional complex nutrients, the main organic base is an autolyzed yeast.

Ecobiol A special fermentation regulator and activator that generates both growth factors and survival factors associated with cellulose. Ideal for all fermentation situations.



Ecobiol Perlage A special regulator for secondary fermentation that generate ammoniacal nitrogen and amino-acid nitrogen. It does not contain inert material. It enables the yeast to express its aromatic potential in full. It does not generate sulphates.



Fosfo Vit A yeast nutrient made up of phosphate and thiamine. It can also be used in the production of organic wine.

Fosfo Vit+ A yeast nutrient made up of phosphate, cellulose and thiamine.

Min Vit A yeast nutrient made up of ammonium salts (sulphates and phosphates), thiamine and inert material.



Ecobiol Blanc A product derived from yeast hulls, rich in rapid-release parietal polysaccharides. When used during fermentation, it makes it possible to obtain more stable wine in terms of colour and flavour (softness and structure) and the bouquet in general.



L

YEASTS FOR ALCOHOLIC FERMENTATION

La Claire range



La Claire eXtreme *Saccharomyces cerevisiae* strain isolated in Napa Valley, California. Ideal for optimal management of the alcoholic fermentation of quality wines with a high alcohol content. Experiments carried out by IOC Group in cooperation with various research institutes on the synergy between yeasts and bacteria have shown it to be highly compatible with the co-inoculation procedure.



C58 For elegant and complex ageing red wines, where the main desired features are taste characteristics and primary and secondary aromas.



T73 For balanced young or new wines, rich in fragrances (red fruits), while respecting the typical colour of the grape variety.



CGC62 For "important" white wines, where the aim is to exalt the olfactory impact in terms of intensity and complexity. For floral wines (white flowers) and fruity wines (citrus fruit in general and wild apple).



EM2 For "important" white wines or ageing white wines, where the aim is to exalt primary aromas, the typical character of the grape variety and the sensory complexity of the wine.



Varietal Touch A special yeast for wines with a strong varietal character, ideal for quality white wines. Thanks to its unique enzyme properties, La Claire Varietal Touch can reveal the varietal aromas present in the must.



SP665 For red and white wines, especially recommended in prise de mousse to produce wine that reflects the typical characteristics of the area and the grape variety. For musts that are difficult to process in limited conditions (amarone, passiti etc.).



VDP For white wines with a strong aromatic character, used to enhance the aromatic and floral components. It is especially recommended for the prise de mousse of neutral or semi-aromatic wines.



La Claire eXtase Yeast isolated from Sauvignon Blanc grapes in the Bordeaux region. Distinguished by its ability to strongly enhance the strength of aromas – in particular citrusy notes, which provide a very pleasant sense of freshness on the nose and in the mouth. With adequate nitrogen-rich nutrition and low-temperature fermentation, La Claire eXtase facilitates the development of a fruity aromatic profile (esters/acetates), while at higher average temperatures it encourages the development of very intense thiol and citrus aromas.

IOC (Institut Oenologique de Champagne) range



Gaïa™ *Metschnikowia fructicola* yeast, which has no fermentation activity but can combat unwanted yeasts. Gaïa™ has been shown to be a useful tool in limiting pre-fermentation sulphitation.

Gaïa™ Drying Kit Specially designed kit for the prevention and control of *Botrytis cinerea* on grapes chosen for drying in order to produce top-quality wines.



IOC Be Fruits Yeast selected for its ability to draw out fruity esters (red berries, pineapple and citrus fruits) in white and rosé wines. Unable to produce SO₂. Can reduce the formation of ethanal, a molecule that easily bonds with sulphites.



IOC Be Thiols Yeast for use in wines with a wealth of fruity thiols. Ideal for producing salubrious, thiol-rich wines and at the same time keeping sulphite levels at a minimum.



IOC Be Fresh Yeast *Saccharomyces cerevisiae*. The result of an innovative yeast selection technology, IOC Be Fresh reveals the aromas linked to the freshness of fruitiness in red wines. IOC Be Fresh does not have the ability to produce SO₂ and allows to reduce the production of ethanal, a molecule that combines easily with sulfites. All these characteristics contribute to make IOC Be Fresh an excellent tool for the vinification of ripe grapes and to obtain healthy, clean red wines, which have a remarkable freshness flavours.



Prime Rouge A special yeast for the fermentation of young red wines. It makes it possible to obtain well-rounded wines with an aroma of red fruit. The resulting wines are characterised by their intense colour, a sharp aromatic intensity with reduced vegetal notes.



R9008 Thanks to its high production of polysaccharides and glycerol, this yeast is recommended for wines with a high alcoholic content or to obtain soft structured wines. It reduces the herbaceous sensation and aggressive tannins.



Fresh Rosé Next-generation yeast that helps produce fresh, fruity rosé wines. Can be used when creating white and rosé wines to produce strong aromas and a long shelf life.



TwICE A yeast selected for white wines with a strong character. It improves the varietal character, revealing white fruit (peach, pear and apricot) and citrus fruit (lemon).



18-2007 In Champagne, it is the most widely used strain in vinification and prise de mousse. It exalts the qualities of the variety and the *terroir* in the finest wines.



IOC DynaMix Complex blend of specially selected yeasts from different varieties of grape to draw out all the potential of the *terroir* with no risk. IOC DynaMix enhances the expression of microbial diversity and at the same time avoids the excessive standardization of wine which can come from uncontrolled fermentation. IOC DynaMix has been formulated specifically for red wines.



BIO Certified ORGANIC yeast. For use when fermenting organically grown grapes. Enhances the natural goodness of the grapes and draws out the characteristics of their native *terroir*.

Blastosel range



Delice Yeast strain selected for its ability to optimize the taste of red wines by releasing mannoproteins that help to improve in-the-mouth sensations and to reduce astringency. The sensory input of Blastosel Delice lies in the enhancement of notes of red berries, dark berries and spices.

Grand Cru For “important” red wines, in order to develop intense aromas (spicy and fruity in general). It does not produce sulphur aromas.

Lambda Characterised by regular fermentation speed, even at low temperatures.



FR95 For ready-to-drink white wines with a decisive fruity character, where the aim is to enrich the aromatic properties with aromas that are a perfect match for the natural endowment of the grape variety.



WhiteFeel Yeast strain selected for its ability to enhance exotic-fruit and citrus-fruit aromas (pineapple, grapefruit) in white and rosé wines. Creates balance between roundness and freshness.



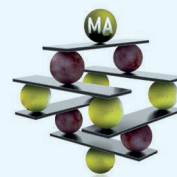
Delta Characterised by regular and rapid fermentation with cleaning, even in the most difficult situations. Resistant to high sugar and alcohol levels, medium-low nitrogen requirement.



P346 A yeast for the fermentation of aromatic white wines, excellent for the production of aromatic and fresh (citrus fruit, white flowers) *Charmat* sparkling wines. Guaranteed regular fermentation, even in conditions with low temperatures.



Horizon This strain displays excellent fermentation activity and is perfect for use on both white and red musts to enhance varietal characteristics. Suitable for primary fermentation, as long as temperature and nutrition conditions are favourable.



T

TREATMENTS CONTAINING SELECTED YEAST DERIVATIVES



Glutarom Extra Nutrient packed with reduced glutathione (GSH). When added at the beginning of fermentation, it leads to the creation of a wine with a higher concentration of GSH, provided that the yeast is given enough organic nitrogen.



Ecobiol Rouge A product derived from yeast hulls, rich in rapid-release parietal polysaccharides. When used during fermentation, it makes it possible to obtain more stable wine in terms of colour and flavour (softness and structure) and the bouquet in general.



Ecobiol SH An alcoholic fermentation nutrient without ammonium salts, which only generates amino-acid nitrogen. It also reduces hints of sulphur that develop during alcoholic fermentation.



Fullprotect This blend of tannins and yeast polysaccharides is effective thanks to the synergy between specific polysaccharides and tannins, which leads to effective preservation of colour, aromas and flavours in white and rosé wines. Performs a targeted action against oxidation at the pre-fermentation stages. Fullprotect is an effective alternative to using SO₂.



Netarom An ageing adjuvant made with inactive yeast selected for its ability to absorb products responsible for the reduction taste.



Netarom Extra An ageing adjuvant made with inactive yeast rich in copper, makes it possible to absorb products that cause reduction taste without adding copper to the wine.

ultiMA Fresh A product made with special completely soluble mannoproteins. When added to the wine before bottling, it stabilises the softness ("sugariness") and aromatic persistence by increasing the overall freshness of the wine. It does not alter the filterability of the wine.

ultiMA Soft A product made with special completely soluble mannoproteins. When added to the wine before bottling, it stabilises the softness ("sugariness") and aromatic persistence by increasing salinity and roundness and decreasing acidic edges. It does not alter the filterability of the wine.

ultiMA Ready Life Liquid preparation made from selected mannoproteins which interacts with the aromatic components of the wine. Increases the colloidal balance of the wine and increases both length in the mouth and "sugariness".

ultiMA Ready Expression Selected mannoprotein fractions in liquid form for instant activation and solubility in the wine to add a touch of freshness in terms of the balance of flavours. In red wines, this product is highly effective at reducing sourness and astringency, while in white wines it enhances sapidity.

ultiMA Ready Fizz Selected mannoprotein fractions in liquid form for instant activation and solubility in the wine, leading to creamier bubbles. Provides significant help in attaining a finer perlage in sparkling wines produced using the *Charmat* method.

ultiMA Jump Preparation made from 100%-soluble yeast mannoproteins which have been selected specially for their ability to improve white and rosé wines. UltiMA Jump is particularly effective at drawing out citrusy thiol notes, leading to intense freshness in the mouth. Our research has demonstrated the ability of UltiMA Jump to bring the structure of wines back into balance, reduce dryness and astringency, and increase the persistence of aromas and flavours.

E

ENZYMES

Eno&Zymes range

ClearSpeed A granular pectolytic enzyme to accelerate the clarification of white must, thereby guaranteeing fresher, fruitier aromas.

SweetPress A granular pectolytic enzyme for the skin maceration of white grapes. It is conducive to aromatic extraction.

AromPress A granular pectolytic enzyme for skin maceration for aromatic white wines. It is conducive to aromatic extraction and expression.

TrueColor A granular pectolytic enzyme for maceration of red grapes. It is conducive to the breakup of tannins, polysaccharides and aromatic precursors contained in the skin.

AromColor Pectolytic enzyme in granule form, for use when macerating red-wine grapes. Boosts the breakdown of the polysaccharides, tannins and aroma precursors contained in the skins. Moreover, thanks to its special formulation, it frees aroma precursors right from the fermentation stage.

EvolutionPlus A granular pectolytic/ β -glucanase enzyme for the ageing of white and red wines. It improves the overall sensory profile (taste and aromas) of the wine.

Process Extreme In granule form, for clarifying or macerating troublesome base materials. Thanks to its formula, it is active even at low pH and in difficult conditions in general. Suitable for working on sparkling-wine bases or not-fully-ripe grapes.

EnzyFlow A granular pectolytic/ β -glucanase enzyme, one of a kind, with supplementary action to improve the filterability of must and wine.

Zimopec range

P110L A liquid enzyme formula for the rapid clarification of white must. The formula makes it possible to obtain clear must in rapid time.

PML A liquid enzyme formula for the pre-fermentation maceration of white grape varieties. It is conducive to the release of aromatic precursors. It increases the yield of flower must.

PXL-09 A liquid enzyme formula for extraction from red grape skins. It improves the overall quality and the production processes.

2 Flottoflash Flottoflash 2 is a product developed for flotation in the most difficult cases. It has a high pectolytic activity that breaks down pectins and assists the formation and growth of floccules that are easier to separate. The advantages deriving from the use of Zimopec Flottoflash 2 are a reduction in the pre-flotation dwell time, a reduction in the use of clarifiers and better growth of floccules, which is reflected in better clarification.

Flottoflash A liquid enzyme for continuous and discontinuous flotation. The formula makes it possible to obtain clear must in rapid time and at low temperatures.

Clear Flash A liquid enzyme for the clarification of white wines. The formula makes it possible to obtain clear must in rapid time and at low temperatures.

Press Flash A liquid enzyme for the skin maceration of white grapes.

Color Flash A liquid enzyme for extraction and stabilisation during red maceration.

PX5 A solid enzyme formula for optimising the extraction of precursors and polyphenols from red grape varieties. It improves the sensory profile.



C

VINIFICATION AND FINING

MetalClean Insoluble polyvinylimidazole and polyvinylpyrrolidone (PVI/PVP) co-polymers and chitosan derived from *Aspergillus niger*. MetalClean exploits the synergistic capacity of its components to adsorb metals such as copper, iron, lead and aluminium. MetalClean's metal-removing action creates an optimal environment for starting off and regulating alcoholic fermentation, while lessening any tendency to oxidation or pinking.

Clear GT F Clarifier formulated using PVPP, non-animal-origin protein and silica gel for rapid, high-performance flotation.

Clear GT W Clarifier formulated using PVPP, non-animal-origin protein and bentonite for the synergistic removal of unstable proteins and oxidizable phenols.

Clear GT R Product containing non-animal-origin protein, selected yeast hulls and silica gel for phenol clarification during fermentation leading to greater softness in the mouth.

P-Cell Compound clarifying and stabilising agent (PVPP, activated bentonites and alpha-cellulosic fibres) ideal for use in fermentation.

Inofine V Mes Liquid additive made from pea protein, for performing fining or flotation on must. Recommended as a preventive treatment for musts at high risk of oxidation, Inofine V Mes significantly increases resistance to oxidation, enhances sensory properties, reduces bitter tastes and eliminates vegetal or grassy notes from wines subject to oxidative browning.

Easy'Up Liquid additive made from vegetable charcoal, pea protein and bentonite clay designed for use in flotation. Easy'Up performs a powerful action on browned/oxidized must, helps reduce the quantity of oxidized and oxidizable phenol compounds, facilitates clarification and helps create a more compact flotation cap.



Qi No[Ox] A clarifying agent and stabiliser for wines and musts, an alternative to casein, the first non-allergenic and biodegradable formula that does not contain products of animal origin or synthetic products.

Qi Fine Hi-tech additive composed of non-animal-origin polysaccharides (chitin derivatives and pea protein), very effective in stimulating rapid flocculation in red wines. Perfect for eliminating phenolic compounds, Qi Fine is an excellent natural, biodegradable, allergen-free, animal-product-free solution.



Qi Fine Mes Liquid additive made from fungal-origin chitosan and pea protein, for performing fining or flotation on white and rosé must. Thanks to the synergistic action of its components, Qi Fine Mes leads to quicker, more effective flocculation and sedimentation. Perfect for use in flotation, as it's easy to use and leads to swift detachment of solid particles from the liquid interface.

Qi Up-XC Powder clarifier for flotation procedures in white, rosé and red musts. Qi Up-XC is an innovative flotation additive: natural, biodegradable, allergen-free and free from animal products. Made of biopolymers from chitin derivatives with an elevated surface charge affecting the pH of the wine, it enhances performances in the process in which the solid particles separate from the liquid through the rapid formation of flocs; these bond to the micro gas bubbles, become less dense and float to the surface.



Qi Up XC Mes Liquid additive made from chitosan, for performing fining or flotation on white and rosé must. This product is distinguished by its high surface density charge at the pH of the wine. This property gives it a high level of affinity and reactivity to suspended particles, which means that it produces rapid flocculation.

PK SOL M A product for the clarification of red, white and rosé wines, allergen free. The latest-generation formula made up with chitin polysaccharides. Excellent brightening and subtractive power towards the oxidised and oxidisable polyphenolic fraction.



Lumyclean Plus Stabilizer used to eliminate oxidized and oxidizable polyphenols from must and wine. When making white and red wines, it can be used both as a preventive and curative treatment in order to prevent oxidative degradation or to 'rejuvenate' oxidized wines. Lumyclean Plus also enhances the longevity of wines and significantly improves their colour when it has been affected by oxidation. Lumyclean Plus is also effective at reducing the riboflavin content of white and rosé wines, helping the winemaker avoid the so-called 'light-struck taste' phenomenon.



Fyneo Protein-rich yeast extract which provides a powerful clarifying action and aid to rapid sedimentation. It fines the wines by eliminating any hard or bitter sensations, yet preserves the desirable sensory characteristics.



Cristalline Liquid High quality liquid isinglass, stabilised and ready to use.



Cristalline Plus Isinglass derived from swim bladder. A natural clarifying agent with high molecular weight and incomparable brightening power.



Qi Trapping A unique and innovative technological adjuvant, allergen free, consisting of polysaccharides derived from chitin and yeast derivatives, which makes it possible to reduce the concentration of unwanted heavy metals.

Bent'Up Bent'Up is a sodium bentonite clay particularly recommended for flotation with excellent clarification properties. It displays the ability to adsorb proteins and effectively removes unstable protein particles, oxidase enzyme compounds (polyphenol oxidase) and phenol-based particles. In white wines, its capacity to eliminate heat-sensitive proteins avoids the onset of clouding. Strongly recommended for use when the wine has been treated with carbon, as it can remove any residual particles still suspended in the wine.

Inobent Nat Non-activated bentonite clay for use as a fining agent in must and wine. In granular form for ease of use. Inobent Nat displays excellent decoupling properties as it ensures optimal lees sedimentation. Inobent Nat interacts with proteins to provide optimal protein stabilization in white and rosé wines.



B

BACTERIA FOR MALOLACTIC FERMENTATION



IOC Extraflo Direct inoculation bacteria (MBR). They increase spicy and fruity notes and the sensation of roundness and volume. They are ideal when used in the post-alcoholic fermentation inoculation technique and are suitable above all for red wines.



Extraflo Pure Fruit *Oenococcus oeni* for direct inoculation to give purity of the fruity notes and for the control of malolactic fermentation in difficult conditions. Oenological selected bacteria, vigorous in difficult conditions (high alcohol, high acidity or reduced quantity of malic acid or low temperatures). Suitable for very different types and origins of wine, it can be added directly into the must or wine. Extraflo Pure Fruit favours the purity of the fruity profile of the grapes and helps to reach roundness.



IOC Inoflore Direct inoculation bacteria (MBR). They increase fruity and floral notes, resulting in minimum production of diacetyl ("butter"). They are ideal when used in the yeast/bacteria co-inoculation technique and are suitable for white, red and rosé wines.

IOC Maxiflore Satine Rapid preparation bacteria (1-Step). They increase fruity notes with low production of diacetyl. They are extremely resistant to high alcohol content and are suitable above all for red wine vinification processes.

IOC Maxiflore Elite Rapid preparation bacteria (1-Step). They increase fruity notes and the sensation of body and volume in the mouth. They are suitable for large volumes in red and white wine vinification processes.



IOC Inobacter Long preparation bacteria (Standard). They are suitable for all oenological situations, thanks to low production of diacetyl, and exalt the varietal notes of the wine. They are suitable for the preparation of sparkling bases with the traditional method or wines with "difficult" oenological conditions.

Nutriflore FML A malolactic fermentation regulator and activator. It adds essential nutrients to allow bacteria to carry out optimum malolactic fermentation, along with fundamental supports for rapid fermentation.

Nutriflore PDC A special nutrient for the rehydration of malolactic bacteria. It is especially recommended when there are difficult alcoholic fermentation conditions.

Zimopec Ovalys A pure hen egg white derivative. It acts against gram+ bacteria (lactic bacteria). It has no effect against acetic bacteria and yeast.



IOC Sentinel Innovative, totally allergen-free and GMO-free product for keeping bacteria under control both before and after malolactic fermentation.

TC

TREATMENTS TO CORRECT
SPECIFIC DEFECTS

Absolute MV This product selectively reduces pesticide content. For use during alcoholic fermentation or during clarification of the wine. Can be used on both red and white wines.



Absolute SP Blend of yeast hulls from various strains of *S. cerevisiae*. Ideal for reducing pesticide residues, which can potentially inhibit alcoholic fermentation or bubble production. Absolute SP is recommended for use in base wines destined to become sparkling wines.



Lumyclean Rex Blend of a special activated vegetable charcoal – selected for its high level of purity – and silica gel. Effective at very low doses and with short contact times, Lumyclean Rex is a special treatment for white and rosé wines that helps winemakers avoid the so-called ‘light-struck taste’ caused by the photoreduction of riboflavin (a photosensitive molecule) following exposure to natural or artificial light when the wine has been bottled in colourless glass. If the correct dosages are used, Lumyclean Rex does not alter the colour of rosé wines.

Carbo F Special vegetable carbon with intense decolourizing power. During production, Carbo F undergoes a chemical-physical activation process that increases its efficacy, as it gives the carbon extra reactivity. Carbo F is highly porous, making it perform extremely well in winemaking, as the contact surface between the carbon and the must/wine is exceptionally large. The low doses required allow the wine to preserve its whole bouquet of aromas.

Carbo Grané Carbo Grané is a carbon in pellet form with an exceptional decolourizing ability. The chemical activation process leads to extremely porous particles which can adsorb various different types of molecules, depending on their size. The careful selection of ingredients is a guarantee of the quality of Carbo Grané, and of a total absence of unwanted by-products, such as metals or odours foreign to the treated product.

S

MICROBIOLOGICAL STABILIZATION

OxyLess range



OxyLess U A special antioxidant for red and white grapes. It prevents browning and oxidation of the must aromas.



OxyLess M A special antioxidant for red and white musts. It protects the aromatic properties obtained at the end of alcoholic fermentation. It is rich in glutathione and antioxidant amino acids.



OxyLess V A special antioxidant for red and white wines. It protects against oxidation and stabilises the anthocyanin fraction still unstable during wine racking processes.

T

TANNINS



Essential AntiOxidant Gall nut tannin with an excellent antioxidant power. It inhibits the enzymatic activity responsible for the oxidation of musts coming from harvests affected by *Botrytis*. Extremely pure tannin very rich in polyphenols. At the recommended dosages it does not bring bitter or astringent notes.



Gallotan It can be used as an adjuvant in clarification operations and is an excellent antioxidant whose action is enhanced when used with sulphur. It protects aromatic substances against oxidation and is essential for treating must infected by botrytis.



Tan FlavourFF A proanthocyanidinic tannin for white and red vinification processes, rich in flavonoids and aromatic precursors.



Cromox A tannin derived from a blend of proanthocyanidinic tannins and gallotannins. Cromox has pronounced antioxidant and stabilising action of the colouring part.



Cromofix SR An oenological tannin for colour stabilisation in red wines. The chemical nature of the tannin in Cromofix is extremely similar to the condensed tannins in grapes.



Tanin TC A pure ellagic chestnut tannin characterised by the absence of bitterness and high chemical reactivity.



Tanin SR A pure quebracho tannin for colour stabilisation.



FullColor Blend of proanthocyanidins, ellagic tannins and polysaccharides (yeast-derived) to use in the fermentation of red-wine grapes. Aids colour stabilization and enhances flavours.



Volutan A 100% liquid grape tannin. Thanks to its original extraction method, it is 100% soluble without any precipitation. It is derived solely from white grapes. It is used in colour stabilisation and to generate softness in wine.



Tanifase Elevage A pure ellagic tannin. The quality of the obtainable results reflects the careful selection of raw materials. It is ideal for eliminating sulphur proteins, preventing oxidation and improving the sensory profile of every wine.



Mann Bouquet R16 A product for red musts, made up with tannins and yeast derivative rich in polysaccharides. It adds complexity and notes of spice and black fruit (currant), and contributes to colour stabilisation.



Mann Bouquet B19 A product for white and rosé musts, made up with tannins and yeast derivative rich in polysaccharides and glutathione. It adds notes of flowers and white fruit. It is an excellent antioxidant.



Tanin Bouquet R36 A cherry tannin for red and rosé musts, which expresses notes of red fruit and stabilises the colour.



Tanin Bouquet B45 A citrus tannin for white and rosé musts, which expresses citrus notes, together with effective antioxidant action.



Bouquet B49 A tannin for white and rosé musts, with a small fraction derived from yeast rich in glutathione. It is ideal for obtaining wines with a fruity, exotic character, and is a powerful antioxidant.



Essential PEP A grape seed tannin, ideal for obtaining protein stabilisation and colour stabilisation, and for improving the structure of the wine (ideal if used in conjunction with micro-oxygenation).



Essential PEL A proanthocyanidinic tannin derived from white grape skins. It improves the structure, body and softness of the wine. It exalts the primary aromas of the wine by increasing its intensity without affecting its sensory profile.



Privilège Duo Oakwood tannin preparation designed especially for use in malolactic fermentation in tandem with Maxiflore Satine, 48h before inoculation. The synergy between Privilège Duo and Maxiflore Satine boosts the production of aroma precursors which increase sensory hints of woodiness (vanilla).



