



# Our new products 2024-2025



### **ACTIPROTECT EXPRESS ™**

Much simpler yeast inoculation, without compromising fermentation quality

- → Combination of a high-quality yeast protector and an innovative micro-agglomeration process: high sterol bioavailability
- Decisive simplification of yeast rehydration: accelerated resuspension, reduced powderiness, no need to heat the water beforehand, no temperature acclimatisation of the yeasts
- → Improves fermentation safety and aromatic revelation







### **EXTRAFLORE DENSITY TM**

#### Add volume to your wines

- → Robust under limiting conditions (high alcohol, low malic acid)
- → Contributes to smoothness and roundness
- Reduces bitterness and aggressivity making red wines easier to drink







### **VINOFINE ROUGE ™**

The leading vegan alternative to gelatin in red wine

- → Unique effectiveness, proven by a 4-year collaborative project
- → Aromas are better respected, recognised by users
- → Reasonable cost





## **Our harvest selection**



### **IOC BE FRESH ™**

Natural yeast to balance the freshness of ripe red grapes... without producing sulphides flavors nor sulphites



### **NATJJA™** range

Improves the wellness of the yeast and optimises its aromatic development capacities



### IOC GAÏA ™

Pre-fermentation bioprotection acclaimed all over the world for its antimicrobial efficacy

## **Bioprotection**

to the action of sulphites



### **IOC CALYPSO ™**

Optimizes and secures the cold stabulation process on grape lees
Revelation and preservation of varietal thiols



### **Qi FINE ™**

The best alternative to PVPP: adsorption of oxidizable and coloured polyphenols

# **Pre-fermentative bioprotection** - Usable in Organic EU and NOP winemaking

**IOC CALYPSO TM** 



Protection of musts. Non-fermentative *Metschnikowia pulcherrima* helps intensify and protect aromas prior to fermentation.



IOC GAÏA TM



Harvest protection. Non-fermentative *Metschnikowia fructicola* helps combat the development of harmful indigenous flora.



**IOC BOREAL** TM



Bio-acidification of musts. Lachancea thermotolerans yeast capable of producing high levels of lactic acid to rebalance the freshness of wines. A natural alternative to acidifying additives.

<b>Enzymatic tred</b>	mtc	ent
MYZYM AROMA TM	NOP	Brings out varietal aromas from precursors.
MYZYM CLARIF TM	* NOP	Clarifies musts.
MYZYM ULTRA CLARIF TM	* NOP	Clarifies musts in difficult conditions.
MYZYM CLEAR TM	NOP	Clarifies musts and wines affected by Botrytis & enhances filterability.
MYZYM ÉLEVAGE TM	NOP	Enhances richness and aromas by accelerated yeast autolysis.
MYZYM EXTRACT TM	* NOP	Extracts colour and enhances structure.
MYZYM ULTRA EXTRACT TM	* NOP	Extracts colour and enhances structure in difficult conditions.
MYZYM MPF TM	* NOP	Extracts colour and aromatic precursors in cold maceration.
MYZYM READY CLARIFICATION TM	* NOP	Liquid formulation for clarifying musts in difficult conditions.
MYZYM READY EXTRACTION TM	* NOP	Concentrated liquid formulation for grape maceration (increased colour and volume in the mouth).
MYZYM READY EXTREM TM	•* NOP	Liquid formulation for clarifying in extreme conditions (cold, hot, very pectic juices).
MYZYM READY PRESS TM	* NOP	Liquid formulation for increasing the yield during harvest pressing for producing white or rosé wines.
MYZYM READY SPIRIT TM	* NOP	Liquid formulation for pressing and clarifying musts for distillation products (low PME).
MYZYM READY'UP TM	* NOP	Dedicated liquid formulation for clarification in flotation processes.
MYZYM RED FRUITS TM	NOP	Extracts and brings out aromatic precursors in red grapes.
MYZYM WHITE FRUITS TM	NOP	Extracts and brings out aromatic precursors in white grapes.

<sup>• =</sup> liquid formulation / • = Products that may be used in ORGANIC (BIO) winemaking processes (EU) in line with the (EU) COMMISSION EXECUTIVE REGULATION (EU) No 203/2012 of 8 March 2012 and Commission Implementing Regulation No 2018/1584 of 22 October 2018 amending Regulation (EC) No 889/2008 laying down detailed rules for the application of Council Regulation (EC) No 834/2007; the latter two have been repealed and replaced by Regulation (EU) No 2018/848 and its secondary acts (delegated regulation and implementing regulation) and the NOP Regulation for the USA as regards organic wine. It is your responsibility to contact your certification body to check compliance with your charter.\* = under certain conditions, check with our list of usable products in ORGANIC winemaking available on our website.

Clarifying and fining musts
-----------------------------

BENT'UPTM	•	Activated sodium bentonite powder enhances compaction of surface flotation sediment.							
<b>BENTOSTAB</b> <sup>TM</sup>	•	Activated sodium bentonite, comes in powder and granule form, for deproteinising muas well as white and rosé wines.							
CLARIFIANT NAT TM	NOP	A preparation made up of a non-activated bentonite, dedicated to riddling and clarifying sparkling wines produced along traditional method lines.							
COLORPROTECT V TM		A combination of bentonite, PVPP and plant-based protein (pea) for preventive and curative treatment of oxidation.							
FRESHPROTECT NEO TM		Preventive and curative treatment of oxidase breakdown, reduces bitterness and herbaceous notes.							
GEL'UPTM	•* NOP	Porcine gelatine in powder form, soluble when heated.							
INOBENT NAT TM	NOP	Natural sodium-calcium bentonite dedicated to flotation, in granules, for efficient clarification with moderate deproteinisation.							
INOFINE V TM INOFINE V MES TM	* NOP *	Plant-based protein (100% pea) eliminates oxidizable and oxidized polyphenols for preventive treatment of oxidation. INOFINE V $^{\text{TM}}$ and INOFINE V MES $^{\text{TM}}$ are compatible for clarifying and fining musts in flotation.							
PHENOX-FREETM		A dedicated inactivated yeast/PVVP - based formulation which reduces the need for PVPP, while optimizing efficacy. Combats oxidation of white and rosé musts, as well as correcting colours, bitterness and dryness.							
POLYOXYLTM		A combination of bentonite and PVPP for a moderate and clarifying deproteinisation effect. Enhances taste and sensory profiles of musts from affected harvests (mildew).							
PVPP POUDRE		Used for fining musts and wines, PVPP shows great affinity for polyphenols. It provides preventive and curative treatment for oxidation of wines, while reducing bitterness.							
Qi FINE TM Qi FINE MES TM	*	A combination of chitosan and plant-based protein (pea), ideal for fining white and rosé musts, enhancing taste properties and reducing astringency and bitterness, while ensuring antioxidant protection.							
Qi-No[Ox] TM	•*	A combination of plant-based protein (pea), chitosan and ultrapure bentonite used for fining musts and wines to correct oxidised colours.							
Qi UP XC TM Qi UP XC MES TM	*	A biopolymer of fungal origin (chitosan), for clarification of white, rosé and red musts. It features excellent antioxidant properties as a result of interactions with oxidised and oxidisable polyphenols, metal chelation (iron and copper) and its action in eliminating free radicals.							
		A combination of PVI/PVP, yeast cell walls and chitosan, used to trap metals thereby							

### TRAP'METALSTM

A combination of PVI/PVP, yeast cell walls and chitosan, used to trap metals thereby indirectly preserving thiols.

## Oxidative stability of must: lees alternatives

FULLPROTECT TM	NOP	Dedicated inactivated yeasts and tannin to protect colour and aromas of white and rosé wines from oxidation occurring during pre-fermentation stages.	LOw SO <sub>2</sub> SOLUTIONS
GLUTAROM TM	NOP	Inactivated yeasts naturally rich in glutathione. Preserves the aromas and white wines and at the same time prevents premature aromatic ageing.	freshness of
GLUTAROM EXTRA TM	NOP	A formulation with high glutathione content that is pro-active in preserving wines low in sulphites.	LOw SO <sub>2</sub> SOLUTIONS

IOC www.ioc.eu.com

VERSION 23-05-2024

## **Sulphiting operations**

BISULFITE D'AMMONIUM	•	Ammonium bisulphite solution at 150 g/L of SO <sub>2</sub> .
INODOSE™ 2 ou 5	•	Potassium metabisulphite-based effervescent tablets release 2 or 5g of SO <sub>2</sub> .
METABISULFITE DE POTASSIUM	•	Used for sulphiting fresh harvests, musts and wines. For 1g of SO <sub>2</sub> , add 2g of potassium metabisulphite.
SULFITANINTM	•	A solution of ammonium bisulphite and Tara tannin at 100 g/L used for sulphiting musts.
SULFIVIN A TM	•	Solutions of ammonium bisulphite at 100, 180, 400 and 600 g/L of SO <sub>2</sub> .
SULFIVIN K TM	•	Solutions of potassium bisulphite at 100, 150 and 180 g/L of SO <sub>2</sub> .

## **Decolourising and decontaminating musts**

ACTICARBONE ENO TM / CARBION ENO TM	•* NOP*	Activated plant-based carbon with high decolourising power, preserves the organoleptic characteristics of wines.					
CARBION GRANULÉS TM	•	Activated plant-based carbon. Ideal for decolourising stained musts and wines.					
CARBOCLEANTM	•* NOP*	Decolourising and aroma-friendly charcoal.					
FLAVOCLEANTM	NOP*	Activated plant-based carbon, with high deodorizing capacity. Corrects organoleptic characteristics of musts affected by fungi such as rot and powdery mildew.					
OTACLEANTM	NOP*	Activated plant-based carbon, with high decontaminating power against ochratoxin A.					

## Yeast inoculation: Unconventional yeasts

Usable in organic EU and NOP winemaking

**IOC DYNAMIX** TM



A complex mixture of yeasts to bring out terroir potential and allow grapes to achieve their full expression, in complete safety.

## Yeast inoculation: Specific yeasts

Usable in organic EU and NOP winemaking

IOC 18-2007 TM



The reference in Champagne for alcoholic fermentation and secondary fermentation. Excellent adaptation to the most difficult conditions. Rapidly established, it ensures complete breakdown of sugars.

IOC B 2000 TM



Fosters fruity, aromatic expression for producing fresh, aromatic wines. Particularly interesting for grape varieties poor in varietal precursors.

IOC B 3000 TM



Brings out the intensity and aromatic complexity of wines, with notes of yellow fruit and flowers, while contributing to full-bodiedness and roundness.

**IOC BE FRESH** TM



Rebalances aromatic freshness in concentrated harvests, while limiting sulphite content. Prevents the reduction of wines.



IOC BE FRUITS TM



Allows the fruity esters to be revealed without producing SO<sub>2</sub>. For producing healthy, clear wines with intense aromas of fresh fruit, while limiting sulphite content.





Combines strong expression of fruity thiols with an inability to produce SO<sub>2</sub>.



IOC BIO TM



Certified ORGANIC, preserves typicality of still and sparkling wines.

IOC FRESH ROSÉ TM



Enhances the floral and varietal expression of rosé wines. Brings out aromatic intensity with notes of flowers, citrus fruit and spices.

IOC FIZZ TM



For sparkling winemaking using the closed tank method. Ensures rapid and complete secondary fermentation.

IOC FIZZ+ TM



Contributes to the aromatic intensity of sparkling wines produced using the closed tank method. Excellent fermentation capacities in both secondary fermentation and first fermentation.

**IOC INFINI'TWICE TM** 



Perfect balance between body and freshness in white wines, now without limits.

IOC PRIMROUGE R 9001 TM



Ideal for producing round and aromatic wines, typical of red fruits and confectionery. Resulting wines have better colouring, a clear, fruity nose and are supple on the palate.

IOC R 9002 TM



Ideal for producing well-structured wines for laying down. Brings out aromas intermingling spices and black fruits. Enhances colour fixing phenomena.

IOC R 9008 TM



Ideal for producing wines with complex ripe fruit aromas and significant full-bodiedness. Helps limit the sensation of dryness and bitterness.

IOC RÉVÉLATION TERROIR TM



Ideal for preserving the intensity of colour and helps bring out varietal fruity aroma, finesse and elegance.

IOC RÉVÉLATION THIOLS TM



Fosters the full expression of fruity thiols, for a superior aromatic potential, with notes of citrus and passion fruit, while limiting vegetal notes.

**IOC TWICE TM** 



Ideal for a perfect balance between roundness/full-bodiedness and final freshness. Fresh and complex fruity aromas.

## Structuring in fermentation: lees alternatives

**EDIFYS RILIEVO** TM



Allows to work on the attack and the mid-palate of red wines with a sense of volume and smoothness. Contributes to the impression of maturity.

**EDIFYS INCISO TM** 

NOP

Allows to work on the finish of red wines by reducing the sensations of astringency and greenness. Contributes to the impression of freshness.

## **Optimising fermentation**

**ACTICLEAN**<sup>TM</sup>

Detoxicant inactivated yeasts and cellulose medium to prevent or curb sluggish or stuck fermentations.

**ACTIPROTECT EXPRESS TM** 



Much simpler yeast inoculation without compromising fermentation quality. **NEW** 

**ACTIPROTECT+**TM



A protective agent which strengthens the yeast's plasma membrane during rehydration. Better prepared, it consequently produces fewer undesirable compounds.

**ACTIPROTECT ROSÉ TM** 



A latest-generation yeast protective agent that helps release precursors of thiols aromas to bring out the aromatic character of rosé wines.

**ACTIVIT**<sup>TM</sup>

•\*

A nutrient made up of di-ammonium phosphate, inactivated yeasts and thiamine, ensures regular development of yeasts in the event of significant deficiency.

ACTIVIT NAT TM	* A 100%-organic nitrogen nutrient recommended for preventing sulphurou facilitating alcoholic fermentation and bringing out varietal thiols.	odours,
ACTIVIT O TM	<ul> <li>A complete 100%-organic nitrogen nutrient with thiamine for high-quality fern and good aromatic expression, while limiting production of SO<sub>2</sub>.</li> </ul>	nentation
ACTIVIT SAFE TM	* Nutrient and detoxifier for the final phases of alcoholic fermentation.	
AROMACTIVIT 1 & 2 TM	Synergy of nutritional action with 2 complementary nutrients:  • just after yeasting: AROMACTIVIT 1 ™ improves the yeast biomass.  • at 1/3 AF: AROMACTIVIT 2 ™ redirects metabolic flows towards aromatic biomass.	osynthesis.
CELLCLEAN™	<ul> <li>Yeast cell wall with a high adsorption capacity for fermentation inhibitors. P</li> <li>use during fermentation or in case of stuck fermentation.</li> </ul>	reventive
NATJJA™	Improves the healthiness of yeast and its metabolism for bringing out aromas. oxidant stress undergone by the yeast. NEW	Counters
NATJJA FIZZ TM	Improves the healthiness of yeast and its metabolism for bringing out of secondary fermentation conditions. Counters oxidant stress undergone by during this stage. <b>NEW</b>	
VITISTARTTM	A complex nutrient that is a good compromise between a combined nitroge and cellulose source, particularly well-suited for conditions of white and rose	

		Nitrogen source		Nitrogen source  Added assimilable nitrogen (mg/L) for 40g/hL added*		Ammo	oniacal ogen	Nutrients of yeast origin				Others			
		Organic nitrogen	Mineral	Direct calculation	Technical equivalent (kinetic)	Phosphates	Sulphates	Aminoacids	Assimilable peptides	Sterols and lipids	Minerals	Vitamins	Added	Cellulose	Chitosan
	ACTIPROTECT EXPRESS TM			na	na			na	na	***	***	**			
ast	ACTIPROTECT+TM			na	na			na	na	***	**	**			
Yeast rehydration	ACTIPROTECT ROSÉ TM			na	na			na	na	***	***	**			
ory	NATJJA™	***		13,5	35			**	**	*	***	**			**
of senso	NATJJA FIZZ <sup>TM</sup>	***		13,5	35			**	**	*	***	**			*
Optimizers of sensory metabolism	AROMACTIVIT 1 TM	***		38	53			**	**	*	**	**	**		
Opti	AROMACTIVIT 2 TM	***	***	17	45	<b>√</b>		***	*	*	**	**	**		
	ACTIVIT 0 TM	***		17	45			***	*	*	***	***	***		
Organic nutrients	ACTIVIT NAT TM	***		17	45			***	*	*	***	***			
0 2	ACTIVIT SAFE TM	***		8	20			***	*	**	**	**			
Mixed	ACTIVIT <sup>TM</sup>	**	***	52	56	<b>√</b>		**			**	**	**		
Mixed	VITISTART <sup>TM</sup>	*	**	46	48	<b>√</b>	<b>√</b>	*			*	**	**	**	
Detoxicants	ACTICLEAN <sup>TM</sup>	*		1,5	4			*			*	**		**	
Detox	CELLCLEAN™			na	na			na	na	*	**	**			

 $<sup>\</sup>ensuremath{^*}$  For calculation of nutrient addition, please use equivalent nitrogen value

## **Malolactic fermentation**

EXTRAFLORE COMPLEXITY TM (Formerly EXTRAFLORE)	NOP	Controls malolactic fermentation and sensory complexity in wines.
EXTRAFLORE DENSITY TM	NOP	Robust, volume on the palate and smoothness, less aggressive wines (less astringent and less bitter). <b>NEW</b>
EXTRAFLORE CO-IN' TM (Formerly INOFLORE)	NOP	For fruity wines in co-inoculation.
EXTRAFLORE PURE FRUIT TM	NOP	Purity of fruity notes and control of malolactic fermentation in difficult conditions.
INOBACTER TM	NOP	Malolactic fermentation of musts and wines with very low pH.
MAXIFLORE ELITE TM	NOP	Contributes to structure and balance between notes of ripe fruit and spices.
MAXIFLORE SATINE TM	NOP	Reduces astringency and prevents buttery aromas.
NUTRIFLORE FML TM	NOP	Optimised nutrient for accelerating malolactic fermentation.
NUTRIFLORE PDC TM	NOP	Dedicated nutrient for optimising the execution of malolactic starter phases.



## GUIDE TO CHOOSING BACTERIA

			EXTRAFLORE CO-IN' TM	EXTRAFLORE COMPLEXITY TM	EXTRAFLORE DENSITY TM	EXTRAFLORE PURE FRUIT TM	MAXIFLORE SATINE <sup>TM</sup>	MAXIFLORE ELITE™	INOBACTERTM
Type of product		ct	MBR (direct inoculation)	MBR (direct inoculation)	MBR (direct inoculation)	MBR (direct inoculation)	1-Step™ (rapid acalimatisation)	1-Step™ (rapid acclimatisation)	Standard (starter phase)
	Simplicity of us	е	***	***	***	***	***	***	*
	Co-inoculation		****	*	***	***	***	**	*
	Sequential ino	culation	*	***	***	***	***	****	****
Conditions of use		Alcohol	< 13,5 % vol	< 14,5% vol (red wine) < 13,5% vol (white wine)		< 16,5 % vol	< 16% vol	< 15,5% vol	< 13,5 % vol
OI Use	Application	рН	> 3,25	> 3,2	>3,15	> 3,2	> 3,25	> 3,2	> 2,9
	Application parameters	SO₂tot	< 60 mg/L	< 50 mg/L	< 55 mg/L (red wine) < 30 mg/L (white wine)	< 50 mg/L	< 60 mg/L	< 60 mg/L	< 60 mg/L
		Temp*	18 ℃ - 26 ℃	18 ℃ - 22 ℃	18 ℃ - 26 ℃	15 ℃ - 26 ℃	18 ℃ - 26 ℃	18 ℃ - 22 ℃	16 ℃ - 20 ℃
	Resistance to p	oolyphenols	**	**	***	***	***	**	
	Aromatic com	nplexity	***	***	***	**	**	***	***
	Diacetyl (buttery notes)		Nothing in co-inoculation	Average	Low	Very low	Very low	Significant	Very low
Sensory profile	Spices		*	***	*	*	**	***	
	Fruity		***	**	***	****	***	**	***
	Roundness		**	**	****	***	***	**	***
	Structure		*	****	***	**	***	****	
	White wine		**	**	**	**	**	**	***
OF a la simul	Red wine		***	***	***	***	***	***	*
CEnological application	Rosé wine		**	*	**	***	**	*	**
	Base wine		*	*	*	*	*	*	***
	Primeur wine	:	****	*	**	***	**	*	*

<sup>\*</sup> Avoid temperatures above 22°C when ethanol level is above 10% vol, and stay below 20°C when it is above 14% vol.

### Tannins or chips? Each process has its solution!

## Tannins in winemaking

ESSENTIAL ANTIOXIDANT TM





Gallic tannin with remarkable antioxidant properties. Contributing neither astringency nor bitterness, it is an excellent alternative for reducing  $SO_2$  doses.



**FULLCOLOR** TM





Synergetic effect of ellagic, proanthocyanidin tannins and yeast polysaccharides for enhanced stabilisation of the colouring material and heightened taste characteristics in wine (body, bringing out fruity aromas and aromatic freshness).

MANN BOUQUET R16 TM





Synergetic effect of ellagic, proanthocyanidin (grape) tannins and inactivated yeasts rich in manno-proteins to enhance the sensation of full-bodiedness and bring out fruity aromas.

MANN BOUQUET B19 TM





Synergetic effect of proanthocyanidin tannins and inactivated yeasts rich in glutathione for more aromatic freshness and complexity on the palate.

TANIN CRISTALLIN TM





Tara tannin, moderate antioxidant action.

TANIN SRTM





Proanthocyanidin tannin from quebracho, sacrificial effect to preserve the arapes' tannins.

TANIN SR TERROIR TM





A combination of proanthocyanidin and ellagic tannins which improves the structure of wines and acts on the body.

**VOLUTAN** TM





A proanthocyanidin tannin 100% from grapes, which compensates for imbalance in the grape's natural tannins. Stabilise colour by forming tannin/anthocyanin combinations.

## Winemaking chips



### A recipe to suit your aromatic profile (chips and staves)

BALANCE & STRUCTURE TM	NOP	For imbalanced matrices, masks vegetal characteristics.
CHOC & TOASTED TM	NOP	Chocolate and grilled notes, strong sweetening power.
FRUIT & SOFT TM	NOP	Respects fruit, sweetness and discreet vanilla notes.
FULL & COMPLEX TM	NOP	Fullness, sweetness, toasted notes and aromatic complexity.
RICH & SUBTLE TM	NOP	Aromatic complexity, moka notes and caramel. Refreshes fruity notes.
SWEET & FRESH TM	NOP	100% fresh wood, provides structure.

<sup>• =</sup> liquid formulation / ● = Products that may be used in ORGANIC (BIO) winemaking processes (EU) in line with the (EU) COMMISSION EXECUTIVE REGULATION (EU) No 203/2012 of 8 March 2012 and Commission Implementing Regulation No 2018/1584 of 22 October 2018 amending Regulation (EC) No 889/2008 laying down detailed rules for the application of Council Regulation (EC) No 834/2007; the latter two have been repealed and replaced by Regulation (EU) No 2018/848 and its secondary acts (delegated regulation and implementing regulation) and the NOP Regulation for the USA as regards organic wine. It is your responsibility to contact your certification body to check compliance with your charter,\* = under certain conditions, check with our list of usable products in ORGANIC winemaking available on our website.





IOC ZI de Mardeuil BP 25 - 51201 - EPERNAY Cedex - FRANCE **Tél. +33 (0)3 26 51 96 00** ioc@iocwine.com **f**@IOCforWine