

Products for vinification, wine filtration and winery hygiene





PerdominiAn unrivalled partner



The fact that we operate in all the major wine-producing areas in Italy and around the world testifies to our experience in enhancing wines through improved vinification processes.



We work to further improve our skills daily, engaging in ongoing dialogue with oenologists, research laboratories and wineries – perhaps our best source of knowledge and understanding.



We aim to make winemaking an easier task by helping our clients optimize their processes and time management. This is why we never stop trying to find new formulas that will be more effective and more respectful towards the wines themselves, end consumers and the environment.



Thanks to our hands-on experience and our "Research & Development" work, Perdomini can offer clients a range of products for vinifying and ageing still and sparkling wines, as well as a complete range of filtration components and products for cleaning and sanitizing wineries.

CONTENTS

- **OPTIMIZATION** OF ALCOHOLIC FERMENTATION
 - Yeast protection
 - 9 Pesticide reduction
 - 10 Detoxification
 - Organic Nutrition 10
 - 11 Mixed nutrition
 - 12 Inorganic nutrition

YEASTS FOR ALCOHOLIC FERMENTATION

- 15 La Claire range
- 20 Blastosel range

TREATMENTS CONTAINING SELECTED YEAST DERIVATIVES

- Before and during the fermentation
- Aging Adjuvants
- Pre-bottling treatments

ENZYMES

- 34 Eno&Zymes range
- Zimopec range
- 41 Other enzymes

BACTERIA FOR MALOLACTIC FERMENTATION

- Decision criteria
- 44 Direct-inoculation bacteria
- Bacteria with short reacclimatization time
- 45 Malolactic fermentation starter
- Products for governing bacterial populations

- 49 Bentonite clays
- Anti-oxidation treatments
- Riddling adjuvants
- 57 Alternative solution
- Vegan-friendly chitosan-based fining agents
- 62 Fining agents

STABILIZATION

- 66 Gum arabic: stabilization/protection
- Gum arabic: tartaric stabilization
- Tartrate and calcium stabilization
- Carboxymethylcellulose

TREATMENTS TO CORRECT SPECIFIC **DEFECTS**

- 74 Decolourizing carbon
- Decontaminating carbon
- 77 Anti-reduction treatments
- 77 Acidifiers
- 78 De-acidifiers
- 79 Other acids

MICROBIOLOGICAL STABILIZATION

- 80 Sulphites
- 83 Other sulphites

TANNINS

- 85 Limiting antioxidant and antioxydase effects
- Limiting the oxidative degradation of anthocyanins; protecting and stabilizing colour over time
- Special tannin-based products for vinification

WOODEN BARREL SUBSTITUTES

99 Intenso Chips Range

FILTRATION ADDITIVES

- 102 Perlites
- 103 Fossil shell flours
- 103 Precoat filtration

106 CLEANING AND SANITIZING

- 107 Acidic detergents
- 108 Alkaline detergents
- 112 Chlorinated alkaline detergents
- 114 Sanitizing detergents
- 115 Eco-friendly sanitizing detergents
- 116 Cleaning filtration equipment and systems
- 117 Other products

Product key



WINES

white I rosé I red I traditional method I charmat methof



APPEARANCE

LIQUID | POWDER / GRANULAR



ORGANIC

CERTIFIED ORGANIC | ALLOWED IN ORGANIC WINEMAKING



PRODUCT THAT CONTAINS AN ALLERGENIC SUBSTANCE (THE ABSENCE OF THIS SYMBOL MEANS THAT THE PRODUCT DOES NOT CONTAIN ALLERGENS)





KOSHER | KOSHER PASSOVER

OPTIMIZATION OF ALCOHOLIC FERMENTATION

Nitrogen is one of the most important nutrients for yeasts. It's a vital element of wine-making since it has a major impact on the outcome of the alcoholic fermentation stage. A lack of nitrogen in the must generally limits the growth of the yeast, leading to problems with fermentation. The type of assimilable nitrogen used (organic or ammoniacal) and the time it's added are two key factors. Numerous scientific studies on the mechanisms connecting yeast nutrition to aroma expression in wines have demonstrated the importance of the nutritional environment surrounding the yeast on the quality of the final product.



YEAST PROTECTION

1 kg 10 kg

ECOBIOL PIED DE CUVE

Targeted fermentation regulator

This product is derived from specially selected yeast strains which, when added to the juice at the pre-multiplication stage, provide a wealth of secondary nutritional factors that allow the yeast cells to stay perfectly functional. When rehydrating active dried yeast, it can be useful to use Ecobiol Pied de Cuve to avoid stuck or sluggish fermentation, as it provides vital micronutrients for the cells so that there is no danger of deficiencies in trophic factors caused by the composition of the must.

Composition: inactive yeast.

Main application: provide sterols and other crucial components to optimize the metabolic activity of the yeast during the rehydration phase.

Dosage: 10-30g/hL of wine.

1 kg 10 kg

Targeted fermentation regulator

ECOBIOL PIED DE CUVE AROM

Specially selected inactive yeast which avoids excess production of volatile acidity and sulphurous odours. Ecobiol Pied de Cuve Arom increases the yeasts' production and expression of aromas in any conditions, even where there is high pressure (sparkling/effervescent wines). Supplying free amino acids to the yeast makes it possible to improve the aroma-production process, leading to more intense, complex wines as early as the end of alcoholic fermentation.

Composition: inactive yeast.

Main application: provide crucial elements for full expression of the sensory potential of the yeast during rehydration.

Dosage: 10-30g/hL of wine.

Compound to reduce the pesticide levels in must and wine

Product designed to absorb pesticide residues in must and wine. Absorbe MV cleanses the must or wine of pesticide residues, optimizes the fermentation kinetics, reduces the latency stage and draws out the aromatic properties of the yeasts.

PESTICIDE REDUCTION

Composition: carbon, yeast cell walls, bentonite clay and yeast protein extract.

Main application: absorb pesticide residues which could compromise the alcoholic fermentation process.

Dosage: 20 - 100 g/hL.

ABSORBE MV

ABSORBE SP

Compound to reduce pesticide levels in sparkling wines

Absorbe SP yeast hulls absorb any residual pesticides in wines, in particular those which S. cerevisiae shows a strong affinity for. Thanks to this affinity, Absorbe SP is ideal for preparing bases to turn into sparkling wines.

Composition: yeast hulls, yeast protein extract.

Main application: absorb pesticide residues which could compromise alcoholic fermentation or secondary fermentation.

Dosage: 20-40g/hL. Legal limit: 40g/hL.





















DETOXIFICATION

500 g - 5 kg 15 kg

MUST CLEAN

Yeast hulls with a powerful detox action

Using Must Clean encourages smooth alcoholic fermentation and helps limit the risk of sluggish fermentation thanks to its ability to remove toxins and the fact it provides survival factors. In the event of stuck alcoholic or malolactic fermentation, Must Clean cleans up the environment before fermentation is started up again.

Composition: yeast hulls.

Main application: detoxify must.

Dosage:

• For stuck / sluggish fermentation: 20-40g/hL

• As prevention: 10-30g/hL

Legal limit: 40 g/hL.



1 kg

ECOBIOL ICE

Yeast nutrient to enhance freshness sensation of white and rosé wines

Ecobiol Ice is a specific nutrient 100% composed of yeast fractions. Very rich in assimilable aminoacids and peptides, Ecobiol Ice optimizes the yeast metabolic pathways in order to enhance the revelation and synthesis of aromatic compounds associated to the perception of freshness in white and rosés wines from different grape varieties. Content in minerals from yeast origin ensures a good behavior of intracellular enzymes that permits the full conversion of aromatic precursors into odorant compounds.

Composition: preparation derived from yeast fractions, for the improvement of sensory properties in white and rosé wines.

Main application: Ecobiol Ice enhances the secondary metabolism of the yeast, providing that there is enough nitrogen in the must to ensure fermentative performances. An additional classical nutritive complementation is recommended and should be considered depending on the initial YAN level.

Dosage:

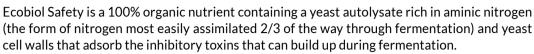
• 30-50 g/hL

OPTIMIZATION OF ALCOHOLIC FERMENTATION MIXED NUTRITION

1 kg - 5 kg 15 kg

ECOBIOL SAFETY

Detoxifying nutrient at the 2/3 stage of alcoholic fermentation



Ecobiol Safety both gives a boost to the yeast population – helping them to activate their sugar-metabolizing capacity in the event of slow or sluggish fermentation (or where not enough assimilable nitrogen was available at the early stages) – and limits the stress suffered by the yeast because of an accumulation of toxic substances. Ecobiol Safety contains yeast cell walls, which are responsible for adsorbing a number of the short-chain fatty acids produced by the yeast during fermentation that and can have harmful effects on the yeast itself.

Composition: yeast autolysate, yeast hulls.

Main application: in the event of either underestimating the initial level of assimilable nitrogen in the must; over-rapid, sluggish or slow fermentation; overly high or low temperature; overly high alcohol level.

Dosage:

• between 20 and 40g/hL, depending on conditions, when the must arrives at a density of 1020-1010 (the 2/3 point of fermentation): 20g/hL if conditions are difficult; 40g/hL if the fermentation is slowing down or it hasn't been possible to provide adequate nutrition to the yeast. Maximum legal limit 65 g/hL.

MIXED NUTRITION

1 kg 10 kg

ECOBIOL

Mixed nutrient

The nutrients provided by Ecobiol, such as assimilable nitrogen, unsaturated fatty acids and sterols, are a guarantee that the cellular structure of the yeast will develop optimally, so that the cells will be able to resist the increasing concentration of alcohol. The yeast hulls and α -cellulose fibres in this product remove inhibitory substances from the must/wine, especially medium-chain fatty acids and inhibitory exogenous factors such as pesticide residues. Ecobiol is particularly effective when the grape harvest has been affected by sour rot, when the must is particularly sugary, or when intense fining has deprived the must of essential growth factors for the yeast.

Composition: ammonium sulphate, diammonium phosphate, yeast hulls, α -cellulose fibres.

Main applications: provide essential nutrients for Blastomyces metabolism and remove exogenous and endogenous toxins.

Dosage:

- 20g/hL in fermentation and refermentation.
- 50g/hL to treat stuck fermentation.













1 kg 25 kg

1 kg 15 kg

(K)

Targeted secondary-fermentation regulator

Targeted fermentation regulator for sparkling wine production using either the traditional method or the autoclave. Ecobiol Perlage provides nitrogen - of both mineral and amino acid origin - and vitamins, oligoelements, long-chain fatty acids, sterols and cell-wall polysaccharides that act by adsorbing any inhibitors present (e.g. short-chain fatty acids). This balanced blend encourages a swift fermentation process and has positive effects on aromas and bubble formation, not to mention the considerable advantages in terms of time, process management and money.

Composition: inactive yeast, diammonium phosphate.

Main applications: provide ammoniacal nitrogen and amino acid nitrogen for secondary fermentation.

Dosage: 10-55 g/hL.

INORGANIC NUTRITION

AMMONIUM PHOSPHATE DIBASIC

Inorganic nutrient

Composition: diammonium phosphate

Main application: boost yeast multiplication by providing additional nitrogen.

Legal limit: 100 g/hL.

ACTIBIOL

Inorganic nutrient

Ideal for severe nitrogen deficiencies, Actibiol can be used in both fermentation and refermentation to provide the ammonium salts and thiamine needed by the yeast for multiplication and fermentation metabolism. The cellulose it contains facilitates the even spread of the yeast cells through the biomass being fermented.

Composition: ammonium sulphate, diammonium phosphate, cellulose, thiamine.

Application: boost yeast multiplication.

Dosage:

• 5-40 g/hL depending on the amount of assimilable nitrogen in the must, the yeast strain used and the sugar concentration.

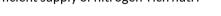
Legal limit: 40 g/hL.

OPTIMIZATION OF ALCOHOLIC FERMENTATION INORGANIC NUTRIT

CLASSIC PHOSPHATE

Inorganic nutrient for secondary fermentation

This product facilitates the complete break-down of sugar into alcohol by the yeast. Applied at the time of preparing the pied de cuve or when using the traditional method, it boosts the start-up of alcoholic fermentation as well as ensuring a sufficient supply of nitrogen-rich nutrition until fermentation is complete.



Composition: diammonium phosphate and thiamine.

Main application: provide nitrogen-rich nutrition for secondary fermentation.

Dosage: 5 g/hL. Legal limit: 6 g/hL.

TIAMINA

Inorganic nutrient

Composition: thiamine hydrochloride (vitamin B1).

Main application: boost the growth of the yeasts in the must and increase their viability during alcoholic fermentation. Acts on carbohydrate metabolism at the time of ketonic acids undergoing decarboxylation to become aldehydes.

Dosage: 0, 05 g/hL. Legal limit: 60 mg/hL.







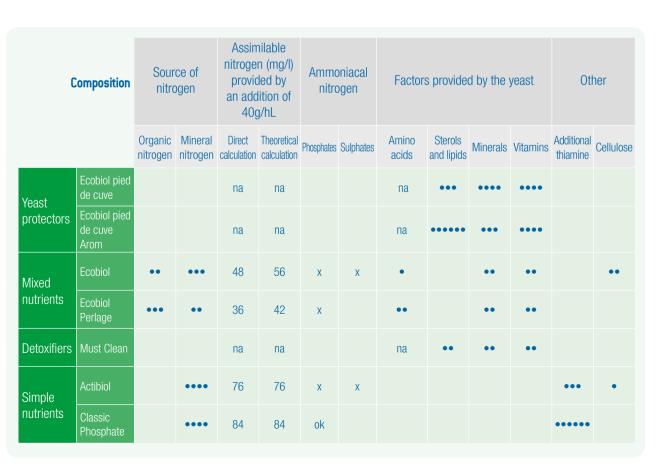














YEASTS FOR ALCOHOLIC FERMENTATION

YEASTS FOR ALCOHOLIC FERMENTATION

The starter yeasts proposed in this section are the result of a selection process enacted by Perdomini researchers in order to obtain a series of specific results from fermentation.

Each strain has been selected to comply with specific technical objectives, such as the expression of a specific sensory profile, alcohol tolerance, resistance to high temperatures, nitrogen requirements and effect on the colour and softness of the wine.

The great advantage of using selected starter yeasts is that they allow the winemaker to start up fermentation in such a way that their desired outcomes are guaranteed.



LA CLAIRE RANGE



YEASTS FOR RED WINES

500 g

LA CLAIRE EXTREME

Active dry yeast

This yeast has been selected for its ability to start up fermentation in musts with a high sugar content destined to become quality wines with a high alcohol content (Amarone, Primitivo, Grenache...) with only limited volatile acidity production. La Claire eXtreme also shows an outstanding ability to produce elegant, persistent aromas in harmony with the volume created by its prolific production of polysaccharides during fermentation.

Main applications: for musts with a high sugar content destined to become quality wines with a high alcohol content.

Composition: Saccharomyces cerevisiae

Dosage:

- 10-25 g/hL for fermentation
- 30-50 g/hL for stuck fermentation or in the most difficult cases

| FERMENTATION KINETICS | RECOMMENDED FERMENTATION TEMPERATURE | ALCOHOL TOLERANCE | NITROGEN REQUIREMENTS | SENSORY PROFILE |
|--------------------------|--|----------------------|--------------------------|--|
| short | from 15 - 35°C | high (17.5% vol.) | low | notes of mature red fruit and jam accompanied by hints of nuts and spices |

* upon request at the time of ordering





Main application: production of structured red wines.

Composition: Saccharomyces cerevisiae

Dosage:

- 10-25 g/hL for fermentation
- 30-50 g/hL in the most difficult cases

| FERMENTATIO | RECOMMENDED FERMENTATION TEMPERATURE | ALCOHOL | NITROGEN | SENSORY |
|-------------|--------------------------------------|--------------------|--------------|---|
| KINETICS | | TOLERANCE | REQUIREMENTS | PROFILE |
| rapid | from 15 − 35°C | high (16% vol.) | low | fruity aromas that remain stable over time |

* upon request at the time of ordering

500 g

LA CLAIRE T73

Active dry yeast

La Claire T73 stands out because of its production of fruity notes. In red and rosé wines, it is distinguished by its ability to form a high proportion of total flavonoide – with tannins to the fore – which makes it possible to create wines with a stable intensity of colour. La Claire T73 can be used on a whole range of young red and rosé wines: as well as becoming pleasantly fruity, young and aromatic red wines emerge pleasantly soft and well-balanced. Excellent results can be obtained with grapes such as Sangiovese, Dolcetto, Marzemino and Schiava, but also when making new wines in general.



Main application: for the production of red and rosé wines.

Composition: Saccharomyces cerevisiae

Dosage:

- 10-25 g/hL for fermentation
- 30-50 g/hL in the most difficult cases

| FERMEN KINE | | RECOMMENDED FERMENTATION TEMPERATURE | ALCOHOL TOLERANCE | NITROGEN REQUIREMENTS | SENSORY PROFILE |
|----------------|-----|--------------------------------------|----------------------|--------------------------|---|
| rap | oid | from 15 - 35°C | high (17% vol.) | high | enhances fruity notes. Adds softness and balance |

* upon request at the time of ordering

YEASTS FOR ALCOHOLIC FERMENTATION LA CLAIRE RANGE

YEASTS FOR WHITE AND ROSÉ WINES

LA CLAIRE CGC62

Active dry yeast

La Claire CGC62 is distinguished by its very limited development of volatile acidity, even when vinifying clear musts or those with a high alcohol content. Generous feeding with nitrogen not only guarantees continuous fermentation, but also encourages La Claire CGC62 to produce a significant amount of acetates and even more esters, making it particularly suitable for fresh white wines where a fruity. floral set of aromas is desired.



Main applications: for the production of fresh white wines, rosé wines and nouveau wines, as well as *Charmat*-method sparkling wines.

Composition: Saccharomyces cerevisiae

Dosage:

- 10-25 g/hL for fermentation
- 30-50 g/hL in the most difficult cases

| FERMENTATION KINETICS | RECOMMENDED FERMENTATION TEMPERATURE | ALCOHOL TOLERANCE | NITROGEN REQUIREMENTS | SENSORY PROFILE |
|--------------------------|--|------------------------|--------------------------|---|
| rapid | from 15 − 35°C | moderate (14% vol.) | high | maintains and enhances the defining features of the grape variety; enhances fruity, floral and fresh notes. |

* upon request at the time of ordering

LA CLAIRE EM2

Active dry yeast

La Claire EM2 is a varietal strain which is able to free and enhance the terpenic aromatic components peculiar to each grape variety. The aromatic profile of La Claire EM2 is characterized by a positive and intriguing note reminiscent of the reductive notes of Sauvignon Blanc. It also has the right characteristics for producing high-range white wines, including those aged or fermented in barriques, which varietal characteristics are enhanced.

Main application: production of high-range white wines.

Composition: Saccharomyces cerevisiae

Dosage:

- 10-25 g/hL for fermentation
- 30-50 g/hL in the most difficult cases

| FERMENTATION KINETICS | RECOMMENDED FERMENTATION TEMPERATURE | ALCOHOL TOLERANCE | NITROGEN REQUIREMENTS | SENSORY PROFILE |
|--------------------------|--|----------------------|--------------------------|---|
| rapid | from 15 - 30°C | high (15% vol.) | average-high | releases varietal terpenic aroma compounds. Greater roundness and softness. Adds reductive notes, enhances fruity and floral notes. |

* upon request at the time of ordering















LA CLAIRE VDP

Active dry yeast

The perfect yeast for producing high-quality sparkling wines whether the second fermentation takes place in the bottle or in the autoclave. La Claire VDP makes it possible to obtain fresh white wines endowed with a fruity, floral aromatic structure. Perfect for sparkling white wines, La Claire VDP enhances elegance, fineness, structure and aromatic complexity in the first fermentation, which means that bubble formation in the second fermentation can take place more quickly, cleanly and completely, even when working at low temperatures or with a high alcohol content.

Main applications: secondary fermentation using either the traditional or Charmat method, stuck fermentation.

Composition: Saccharomyces cerevisiae r.f. bayanus

Dosage:

- 10-25 g/hL for fermentation
- 30-50 g/hL in the most difficult cases

| rapid | from 15 - 32°C | TOLERANCE high | REQUIREMENTS average-high | PROFILE enhances fruity and floral notes |
|--------------|----------------|-------------------|---------------------------|---|
| FERMENTATION | | | NITROGEN | SENSORY |

* upon request at the time

of ordering

500 g

LA CLAIRE EXTASE

Active dry yeast

Yeast isolated from Sauvignon Blanc grapes in the Bordeaux region. Distinguished by its ability to strongly enhance the strength of aromas - in particular citrussy notes, which provide a very pleasant sense of freshness on the nose and in the mouth. With a proper nitrogen nutrition and by conducting fermentation at low temperatures (16 °C), the development of a fruity aromatic profile (esters-acetates) is favored, while at higher temperatures the development of very intense thiol and citrus aromas is favored. The aromatic intensity provided by La Claire Extase is greater the cleaner the must is (<100 NTU).

Main applications: to enhance the aromatic intensity of white wines.

Composition: Saccharomyces cerevisiae

Dosage:

- 10-25 g/hL for fermentation
- 30-50 g/hL for stuck fermentation or in the most difficult cases

| FERMENTATION KINETICS | RECOMMENDED FERMENTATION TEMPERATURE | ALCOHOL TOLERANCE | NITROGEN REQUIREMENTS | SENSORY PROFILE |
|--------------------------|--------------------------------------|----------------------|--------------------------|--|
| rapid | from 13 − 20°C | high (14,5% vol.) | average-high | aromatic intensity, freshness, fruity, thiol, persistence |

LA CLAIRE VARIETAL TOUCH

Active dry yeast

Strain isolated in the Marlborough region, New Zealand, La Claire Varietal Touch is characterized by the low production of hydrogen sulphide. La Claire Varietal Touch is the strain par excellence in varietal expression and is capable of recognising the vine variety's typical aromatic notes, thanks to its enzymatic range, which is capable of releasing flavours in the form of precursors. La Claire Varietal Touch is at its very best in the production of important and full-bodied white wines.

Main applications: for the production of varietal white wines and when crafting full-bodied, structured white wines.

Composition: Saccharomyces cerevisiae

Dosage:

- 10-25 g/hL for fermentation
- 30-50 g/hL in the most difficult cases

| FERMENTATION KINETICS | RECOMMENDED FERMENTATION TEMPERATURE | ALCOHOL TOLERANCE | NITROGEN REQUIREMENTS | SENSORY PROFILE |
|--------------------------|--|----------------------|--------------------------|--|
| normal | from 14 - 22°C | high (15% vol.) | moderate | expression of aromatic varietal notes |

YEASTS FOR SPARKLING WINES

500 g

500 g









LA CLAIRE SP665

Active dry yeast

The cryophilia and alcohol tolerance make La Claire SP665 suitable for the production of high-quality sparkling wines produced both using the traditional method and with re-fermentation in an autoclave. Elegance, fineness, structure and aromatic complexity are enhanced by La Claire SP665 in the first fermentation, which can be followed by guick, clean and complete bubble formation even at low temperatures and with a high alcoholic content.

Main application: production of high-quality sparkling wines both using the traditional method and with re-fermentation in an autoclave.

Composition: Saccharomyces cerevisiae r.f. bayanus

Dosage:

- 10-25 g/hL for fermentation
- 30-50 g/hL for stuck fermentation or in the most difficult cases.

| FERMENTATION KINETICS | RECOMMENDED FERMENTATION TEMPERATURE | ALCOHOL TOLERANCE | NITROGEN REQUIREMENTS | SENSORY PROFILE |
|-----------------------|--------------------------------------|----------------------|--------------------------|---|
| rapid | from 10 − 30°C | high (18% vol.) | low | elegance, fineness, structure and aomatic complexity |

^{*} upon request at the time of ordering









BLASTOSEL RANGE



YEASTS FOR RED WINES

BLASTOSEL DELICE

Active dry yeast

Yeast strain for red wines that releases large quantities of polysaccharides and mannoproteins, making it ideal for complex, high quality wines. Blastosel Delice is distinguished by the complex range of spicy aromas it adds to wines.

Main application: for the production of high quality red wines.

Composition: Saccharomyces cerevisiae

Dosage:

• 15-30 g/hL

| FERMENTATION KINETICS | RECOMMENDED FERMENTATION TEMPERATURE | ALCOHOL TOLERANCE | NITROGEN REQUIREMENTS | SENSORY PROFILE |
|-----------------------|--------------------------------------|-----------------------|--------------------------|-------------------------------|
| normal | from 18 - 32°C | high (15,5 % vol.) | average-high | complex range of spicy aromas |

BLASTOSEL GRAND CRU

Active dry yeast

This product's distinctive feature is its ability to develop complex aroma compounds with longterm stability and to extract flavonoids, whether in the form of tannins or anthocyanins, leading to long-term colour intensity.

Main application: for the production of full-bodied red wines.

Composition: Saccharomyces cerevisiae r.f. bayanus

Dosage:

- 15-25 g/hL under normal conditions
- 30-40 g/hL for stuck fermentation or in the most difficult cases

| FERMENTATION KINETICS | RECOMMENDED FERMENTATION TEMPERATURE | ALCOHOL TOLERANCE | NITROGEN REQUIREMENTS | SENSORY PROFILE |
|-----------------------|--------------------------------------|-----------------------|--------------------------|---|
| normal | from 16 − 30°C | high (17,5 % vol.) | low | full expression of complex aroma compounds |

YEASTS FOR ALCOHOLIC FERMENTATION BLASTOSFI RANGE

BLASTOSEL LAMBDA

Active dry yeast

This strain is best suited to making wine from black grapes, when the winemaker wishes to emphasize their varietal notes. Its behaviour towards polyphenols is neutral, so it must be used in tandem with suitable winemaking techniques. Also effective when used for secondary fermentation in the autoclave or when treating stuck fermentation, as it has a strong capacity for fermentation.



Main applications: for the production of white and rosé wines and for stuck fermentation.

Composition: Saccharomyces cerevisiae r.f. bayanus

Dosage:

500 g

10 kg

500 g 10 kg • 15-30 g/hL

| FERMENTATION KINETICS | RECOMMENDED FERMENTATION TEMPERATURE | ALCOHOL TOLERANCE | NITROGEN REQUIREMENTS | SENSORY PROFILE |
|--------------------------|--------------------------------------|----------------------|--------------------------|-------------------------------|
| normal | from 18 - 32°C | high (18% vol.) | average-high | complex range of spicy aromas |

YEASTS FOR WHITE AND ROSÉ WINES

BLASTOSEL FR95

Active dry yeast

Strain that displays excellent kinetic activity in fermentation, even at low temperatures or with high alcohol content; the aromatic profile is particularly rich and complex, with strong fruity notes to the fore completed by significant notes of rose.

Main application: for the production of highly drinkable white wines with strong characters and lots of fruity notes.

Composition: Saccharomyces cerevisiae

Dosage:

- 15-25 g/hL under normal conditions
- 30-40 g/hL for stuck fermentation or in the most difficult cases

| FERMENTATION KINETICS | RECOMMENDED FERMENTATION TEMPERATURE | ALCOHOL TOLERANCE | NITROGEN REQUIREMENTS | SENSORY PROFILE |
|-----------------------|--|----------------------|--------------------------|-----------------------------|
| very rapid | from 12 - 30°C | high (15% vol.). | low | fruity notes, hints of rose |





10 kg











YEASTS FOR ALCOHOLIC FERMENTATION **BLASTOSEL RANGE**

BLASTOSEL WHITE FEEL

Active dry yeast

Yeast strain suitable for white and rosé wines. It adds clear, persistent exotic fruit aromas as well as perfectly integrated notes of fresh fruits.

Main application: for the production of white and rosé wines.

Composition: Saccharomyces cerevisiae

Dosage:

• 10-30 g/hL

| FERMENTATION KINETICS | RECOMMENDED FERMENTATION TEMPERATURE | ALCOHOL TOLERANCE | NITROGEN REQUIREMENTS | SENSORY PROFILE |
|--------------------------|--|---------------------------|--------------------------|--|
| rapid | from 15 - 24°C | moderate (14,5 % vol.) | low | notes of exotic fruits and fresh fruit |

YEASTS FOR SPARKLING WINES

BLASTOSEL DELTA

Active dry yeast

When used on white wines, Blastosel Delta can provide the product with delicate fermentation aromas, even when large volumes are being produced or the must has been clarified. Thanks to its versatility, this strain conserves and draws out the unique varietal characteristics of the grapes.

Main applications: for white wine production and to treat stuck fermentation when using the Charmat method.

Composition: Saccharomyces cerevisiae r.f. bayanus

Dosage:

- 15-25 g/hL under normal conditions
- 30-40 g/hL for stuck fermentation or in the most difficult cases.

| FERMENTATION KINETICS | RECOMMENDED FERMENTATION TEMPERATURE | ALCOHOL TOLERANCE | NITROGEN REQUIREMENTS | SENSORY PROFILE |
|--------------------------|--|----------------------|--------------------------|--|
| rapid | from 12 − 35°C | high (18% vol.). | low | full and balanced expression of grape variety and terroir |

500 g 10 kg







500 g

YEASTS FOR ALCOHOLIC FERMENTATION BLASTOSFI RANGE

BLASTOSEL KAPPA

Active dry yeast

This strain is ideal for making still white and rosé wines, bases for sparkling wines and in secondary fermentation. Its production of acetates and esters draws out fresh and fruity notes, and also makes this strain suitable for creating young, drinkable red wines.

Main applications: for the production of white, red and rosé wines, and for secondary and stuck fermentation.

Composition: Saccharomyces cerevisiae

Dosage:

- 15-25 g/hL under normal conditions
- 30-40 g/hL for stuck fermentation or in the most difficult cases

| FERMENTATION KINETICS | RECOMMENDED FERMENTATION TEMPERATURE | ALCOHOL TOLERANCE | NITROGEN REQUIREMENTS | SENSORY PROFILE |
|--------------------------|--------------------------------------|----------------------|--------------------------|--------------------|
| rapid | from 13 − 30°C | high (15% vol.) | low | fresh fruity notes |

500 g 10 kg

BLASTOSEL P346

Active dry yeast

Yeast recommended for the production of quality white wines. Thanks to its intense beta-lyase and beta-glycosidase activity, it releases intense aromas of fresh fruit (citrus fruits, apple and pear) and white flowers. In fermentation with aroma precursors and organic nitrogen, Blastosel P346 is able to develop a high quantity of aromas evoking white-fleshed and exotic fruits which integrate with the wines's own set of aromas.

Main applications: for the production of aromatic white and rosé wines, secondary fermentation in the autoclave when using the Charmat method.

Composition: Saccharomyces cerevisiae r.f. bayanus

Dosage:

 Bases for sparkling wines: 10-20 g/hL • Secondary fermentation: 10-20 g/hL

| FERMENTATION KINETICS | RECOMMENDED FERMENTATION TEMPERATURE | ALCOHOL TOLERANCE | NITROGEN REQUIREMENTS | SENSORY PROFILE |
|--------------------------|--|---------------------------|--------------------------|--|
| rapid | from 10 - 18°C | moderate (14,5 % vol.) | average-low | aroma of fresh fruit (citrus fruits, apple and pear), exotic fruits and white flowers |











YEASTS FOR ALCOHOLIC FERMENTATION **BLASTOSEL RANGE**

MULTIFUNCTIONAL YEAST

10 kg

BLASTOSEL HORIZON

Active dry yeast

Blastosel Horizon displays good resistance to alcohol, ability to draw out varietal characteristics and clean-cut aromas.

Main application: for the production of white, red and rosé wines.

Composition: Saccharomyces cerevisiae

Dosage:

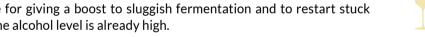
• 15-30 g/hL

| FERMENTATION | RECOMMENDED FERMENTATION TEMPERATURE | ALCOHOL | NITROGEN | SENSORY |
|--------------|--------------------------------------|--------------------------|--------------|--|
| KINETICS | | TOLERANCE | REQUIREMENTS | PROFILE |
| normal | from 15 - 30°C | moderate (14,5% vol.) | average-low | enhances aromatic cleanliness and perception of the terroir |

BLASTOSEL VS

Active dry yeast

The characteristics of Blastosel VS make it ideal for use in red and rosé wines where lively, intense colour is accompanied by the fruity notes generally found in young, drinkable wines. Its strong alcohol-producing power makes it perfect for use when making high-alcohol wines. Blastosel VS is also suitable for giving a boost to sluggish fermentation and to restart stuck fermentation, especially if the alcohol level is already high.



Main applications: for the production of white, red and rosé wines, secondary and stuck fermentation.

Composition: Saccharomyces cerevisiae r.f. bayanus

Dosage:

- 15-25 g/hL under normal conditions
- 30-40 g/hL in the most difficult cases

| FERMENTATION | RECOMMENDED FERMENTATION TEMPERATURE | ALCOHOL | NITROGEN | SENSORY |
|--------------|--------------------------------------|--------------------|--------------|-------------------------------|
| KINETICS | | TOLERANCE | REQUIREMENTS | PROFILE |
| normal | from 15 − 30°C | high (15% vol.) | low | fresh fruity and floral notes |

500 g



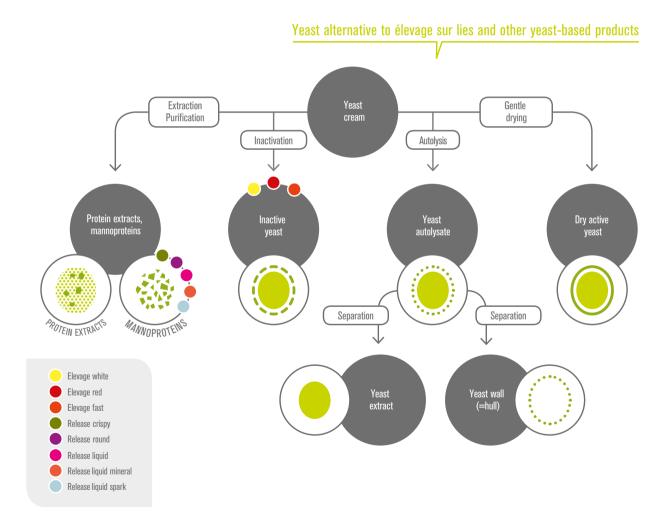




YEASTS FOR ALCOHOLIC FERMENTATION

| | TYPE OF WINE | FERMENTATION KINETICS | RECOMMENDED FERMENTATION TEMPERATURE | ALCOHOL TOLERANCE | NITROGEN REQUIREMENTS | SENSORY PROFILE |
|--------------------------------|-----------------|--------------------------|--|---------------------------|--------------------------|---|
| LA CLAIRE EXTREME | 1 | short | from 15 - 35°C | high (17.5% vol.) | low | notes of mature red fruit and jam accompanied by hints of nuts and spices |
| LA CLAIRE C58 | | rapid | from 15 - 35°C | high (16% vol.) | low | fruity aromas that remain stable over time |
| LA CLAIRE T73 | | rapid | from 15 − 35°C | high (17% vol.) | high | enhances fruity notes. Adds softness and balance |
| LA CLAIRE CGC62 | | rapid | from 15 − 35°C | moderate (14% vol.) | high | maintains and enhances the defining features of the grape variety; enhances fruity, floral and fresh notes. |
| LA CLAIRE EM2 | 11 | rapid | from 15 - 30°C | high (15% vol.) | average-high | releases varietal terpenic aroma compounds. Greater roundness and softness. Adds reductive notes, enhances fruity and floral notes. |
| LA CLAIRE VARIETAL TOUCH | 1 | normal | from 14 - 22°C | high (15% vol.) | moderate | expression of aromatic varietal notes |
| LA CLAIRE SP665 | II | rapid | from 10 - 30°C | high (18% vol.) | low | elegance, fineness, structure and aomatic complexity |
| LA CLAIRE VDP | | rapid | from 15 - 32°C | high (15,5% vol.) | average-high | enhances fruity and floral notes |
| BLASTOSEL DELICE | P | normal | from 18 - 32°C | high (15,5 % vol.) | average-high | complex range of spicy aromas |
| BLASTOSEL GRAND CRU | T | normal | from 16 - 30°C | high (17,5 % vol.) | low | full expression of complex aroma compounds |
| BLASTOSEL LAMBDA | | normal | from 18 - 32°C | high (18% vol.) | average-high | complex range of spicy aromas |
| BLASTOSEL FR95 | | very rapid | from 12 - 30°C | high (15% vol.) | low | fruity notes, hints of rose |
| BLASTOSEL WHITE FEEL | 11 | rapid | from 15 - 24°C | moderate (14,5 % vol.) | low | notes of exotic fruits and fresh fruit |
| BLASTOSEL DELTA | 11 | rapid | from 12 − 35°C | high (18% vol.) | low | full and balanced expression of grape variety and terroir |
| BLASTOSEL KAPPA | 11 | rapid | from 13 - 30°C | high (15% vol.) | low | fresh fruity notes |
| BLASTOSEL P346 | | rapid | from 10 - 18°C | moderate (14,5 % vol.) | average-low | aroma of fresh fruit (citrus fruits, apple and pear), exotic fruits and white flowers |
| BLASTOSEL HORIZON | 777 | normal | from 15 - 30°C | moderate (14,5% vol.) | average-low | enhances aromatic cleanliness and perception of the terroir |
| BLASTOSEL VS | | normal | from 15 - 30°C | high (15% vol.) | low | fresh fruity and floral notes |

TREATMENTS CONTAINING SELECTED YEAST DERIVATIVES



TREATMENTS CONTAINING SELECTED YEAST DERIVATIVES

BEFORE AND DURING THE FERMENTATION

ECOBIOL BLANC

Nutritional supplement with antioxidant functions derived from yeast hulls



1 kg

Ecobiol Blanc, a new nutrient with antioxidant properties derived from a specific strain of yeast. Added immediately after pressing, Ecobiol Blanc serves the dual purpose of providing yeast with nutritional and survival factors in order to have rapid activation and complete regular fermentation, and carrying out antioxidant action at the same time.

Composition: Preparation derived from yeast hulls

Main application: for the improvement of sensory properties and redox in white and rosé wines.

Dosage:

• 20-40 g/hl of crushed grapes.

Maximum permitted dose:

• 40 g/hl (EC Reg. 1622/00).

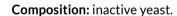
1 kg

ECOBIOL ROUGE

Inactive yeast for stabilization



When added at the early stages of winemaking, Ecobiol Rouge is effective at stabilizing colour and creating softer, more full-bodied wines. It has undergone a special purification process designed specially with this aim in mind and, when used in tandem with other suitable stabilization techniques such as micro-oxygenation and the addition of exogenous tannins, it leads to more intensely coloured, stable and soft wines with plenty of volume.



Main application: Stabilize colour and mouthfeel (softness and structure).

Dosage:

• 20-30 g/hL of juice.





TREATMENTS CONTAINING SELECTED YEAST DERIVATIVES BEFORE AND DURING THE FERMENTATION

ECOBIOL SH

Inactive yeast to decrease the reduction smell

A complete organic nutrient whose composition makes it possible to contribute nutritional substances that are indispensable for the correct yeast metabolism and remove light sulphur compounds (hydrogen sulfide and mercaptans) that cause perceptible sensorial deviations during the whole vinification process. Ecobiol-SH makes it possible to reduce the use of copper (metallic tastes), prevent uncontrolled aeration, a possible cause of oxidation, and bring out all of the aromatic qualities of the grape.

Composition: inactive yeast.

Main application: reduce the sulphurous flavours and odours that can develop during alcoholic fermentation.

Dosage:

- 30-40 g/hL on the appearance of a defect for curative action.
- 20 g/hL during alcoholic fermentation for preventive action.

ECOBIOL AROM PROTECT LOW SOLUTIONS



Blend of tannins and yeast-based polysaccharides

Ecobiol Arom Protect is effective thanks to the synergy between certain components of tannins that act to preserve colour, aromas and flavours in white and rosé wines. It particularly targets oxidation in the pre-fermentation stages: the cell-wall components extracted from a selected deactivated yeast stabilize colour, flavours and aromas, making them less vulnerable to oxidation. The selected tannin extracts, thanks to their level of reactivity to oxygen, limit the oxidation of phenols in the must and reduce the impact of the secondary oxidation mechanisms responsible for the development of unwanted sensory characteristics. Ecobiol Arom Protect is an excellent option for reducing sulphur usage.

Composition: deactivated yeast and tannin extracts.

Main application: protect colour, flavours and aromas in the pre-fermentation stages.

Dosage:

• 30 g/hL

TREATMENTS CONTAINING SELECTED YEAST DERIVATIVES

AGING ADJUVANTS

ELEVAGE WHITE

Deactivated yeasts for the aging of white wines



Made from carefully selected, genuine lees, Elevage White makes it possible to quickly enhance the perception of roundness and fullness in white wines. This product is particularly useful when the quality of the fresh lees is low, or when the lees are a source of contamination or sulphurous odours. Elevage White provides an essential contribution to the long-term stabilization of flavours and aromas thanks to the interaction between its polysaccharides and the wine's innate aromas.



Composition: deactivated yeasts.

Main application: stabilize flavours and aromas when aging white wines.

Dosage:

1 kg

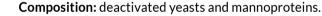
• 10-20 g/hL.

ELEVAGE FAST

Deactivated yeasts and mannoproteins for aging



Elevage Fast is composed of a yeast extract with an extraordinarily high free-mannoprotein content. Also containing peptides and nucleotides, this yeast is particularly effective for the aging process, as it helps increase sensations of volume, fullness and sugar content in a short period of time (from 1 to 8 weeks). This makes Elevage Fast an excellent compromise between the deactivated yeasts designed for longer aging periods and the mannoprotein-rich formulas used to produce instantaneous effects shortly before bottling.



Main application: improve volume, length and sugar content when aging wines.

Dosage:

• 5-20 g/hL.

ELEVAGE RED

Deactivated yeasts for the aging of red wines



With Elevage Red, the winemaker can quickly increase the immediate perception of volume in the mouth to improve the perception of structure in the wine. Tannins have a distinct intensity despite manifesting more softly, with the addition of a hint of sweetness at the end. Through the interaction between its polysaccharides and the polyphenols in red wines, Elevage Red helps stabilize flavours and aromas in the long term. Moreover, its lack of sulphite reductase activity guarantees its neutrality regarding reductive odours.



Main application: improve volume, length and sugar content when aging red wines.

Dosage:

• 10-20 g/hL.



PRE-BOTTLING TREATMENTS

Release RELEASE CRISPY

crispy

Mannoproteins for freshness in the mouth

Release Crispy is a preparation based on selected mannoproteins designed to enhance sensations of freshness in the mouth. Our experiments have demonstrated its ability to rebalance the structure of wines displaying a discrepancy between their phenolic and technological maturity. With an appropriate dosage, Release Crispy reduces bitter and 'green' notes at the same time as increasing freshness in the mouth. When used on less complex wines, it adds to their sweetness and roundness. No matter what wine is being produced. Release Crispy always preserves its originality and unique personality.

Composition: Saccharomyces cerevisiae mannoproteins.

Main application: improve freshness, 'sugariness' and length in the mouth.

Dosage:

• 5-25 g/hL.

Release RELEASE ROUND

round

Mannoproteins for roundness in the mouth

Characteristics: its tendency to contribute to the saltiness of wines and its colloidal action give Release Round a sensory impact with a lot of potential. Whether used on a white or red wine, the tests we have conducted have demonstrated that even very low doses of Release Round can shift the balance of acidity and dryness towards roundness, 'sugariness' and aromatic persistence. Nonetheless, the bouquet and the character of the wine are respected and preserved.

Composition: Saccharomyces cerevisiae mannoproteins.

Main application: improve roundess and the persistence of aromas.

Dosage:

• 5-25 g/hL.

Release RELEASE LIQUID

liquid

Mannoproteins in solution form for aromatic longevity

Release Liquid is a product in solution form which, thanks to the specific mannoprotein extract it contains, interacts positively with the aromatic components in the wine, leading to a longer shelf life. With its ability to increase salinity and provide a colloidal action, Release Liquid provides some very interesting sensory potential. Even very low doses of Release Liquid can shift the balance of acidity and dryness towards roundness, 'sugariness' and aromatic persistence. Nonetheless, the bouquet and the character of the wine are respected and preserved.

Composition: Saccharomyces cerevisiae mannoproteins in a solution stabilized with SO₂.

Main application: increase the persistence of aromas.

Dosage:

• 20-150 mL/hL.

TREATMENTS CONTAINING SELECTED YEAST DERIVATIVES PRE-BOTTLING TREATMENTS

5 L

Release

0,1 kg

1 kg

0,1 kg

1 kg

1 L 5 L

RELEASE LIQUID MINERAL

liquid mineral

Mannoproteins in solution form to re-establish freshness and balanced mouthfeel



Release Liquid Mineral is a product in solution form based on totally soluble mannoproteins which can be added directly to the wine. Thanks to its instant effect, it can be used to treat wine just before bottling. The main effects of using this product can be seen in the aromatic profile, which displays greater freshness and balance. This is particularly useful in the event of a major discrepancy between the phenolic maturity and technological maturity of the wine.

Composition: Saccharomyces cerevisiae mannoproteins in a solution stabilized with SO₂.

Main applications: improve persistence, increase freshness in the mouth and reduce bitter notes.

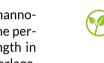
Dosage:

• 20-150 mL/hL.

liquid spark

Release RELEASE LIQUID SPARK

Mannoproteins in solution form for a creamier perlage



Release Liquid Spark is a product in solution form based on selected mannoproteins which balances the perceptions of creaminess and freshness associated with the perlage of wines produced using the Charmat method. It lends greater roundness and length in the mouth, limits the aggressiveness of the bubbles and enhances the elegance of the perlage. Release Liquid Spark has been developed to ensure that it fully respects the expression and purity of aromas in wines produced using the Charmat method, and represents a useful tool for

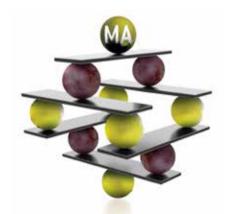
Composition: Saccharomyces cerevisiae mannoproteins in a solution stabilized with SO₂.

Main applications: optimize the mouthfeel of the perlage in wines produced using the Charmat method.

Dosage:

• 5-50 mL/hL.

stabilizing the perlage.





All the products in the Release range can be microfiltered at 0.45 microns, making them ideal for use just before the final filtration and bottling stages.



1 L 5 L





Release RELEASE ANTIOX

antiox

Mannoproteins for added freshness in white and rosé wines

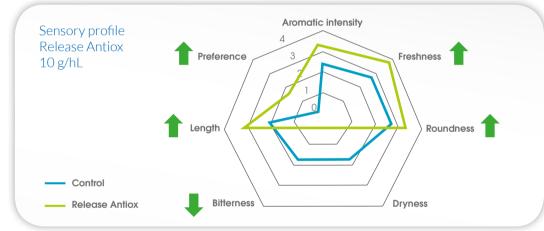
100% soluble yeast-derived mannoproteins selected for their ability to increase freshness and reduce astringency and dryness in white and rosé wines. When the right dosage is applied, Release Antiox significantly reduces dryness and astringency at the same time as enhancing sensations of freshness, roundness and length in the mouth. When used on 'thin' wines, it increases their roundness. No matter what your treatment needs are, the personality and originality of the wine are always left intact.

Composition: Mannoproteins from Saccharomyces cerevisiae.

Main applications: improvement in freshness, roundness and length in the mouth in white and rosé wines.

Dosage:

• 5-30 mL/hL.



Applications

0,1 kg

1 kg



Release crispy

Release crispy To re-establish balance.

Re-establishment of balance in wines with greater phenolic than technological maturity; in wines lacking in richness it adds sweetness and roundedness.





Release round

Release round To gain balance and softness.

Adds salinity to white wines and reduces their level of dryness. In red wines it reduces acidity and astringency while conferring "sugariness" and aromatic persistence.





Release liguid

Release liquid To lengthen aromatic persistence.

Helps preserve the bouquet of aromas in white, red and sparkling wines and increases their aromatic persistence.





Release liquid mineral

Release liquid

Lends freshness to all wines, in terms of balanced flavours.

In red wines, it acts effectively to reduce bitterness and a stringency, while in white wines it enhances the sensation of saltiness.





Release liquid spark

Release liquid spark

a creamier foam and

fineness in sparkling

wines produced using

the Charmat method.

To gain balance, freshness and For creamier foam. softness. Makes a notable

It contributes to contribution to obtaining rebalancing the freshness of white wines decreases dryness and astringency conferring softness and aromatic persistence.





Release

antiox

Release Antiox

FN7YMFS

100 g 500 g

100 g 500 g

ENO&ZYMES RANGE GRANULAR ENZYMES

ENO&ZYMES CLEAR SPEED

Enzymatic preparation for static clarification and flotation

Thanks to its strong pectolytic activity, this enzymatic preparation accelerates the sedimentation of pectin substances in must after pressing, favouring the compaction of the lees even for varieties that are difficult to clarify. Furthermore, thanks to the rapidity of its action, ClearSpeed is suitable for clarification with a flotation unit.

Composition: granules with a high concentration of pectinases, purified by the activity of cinna-myl esterase and anthocyanase. Origin: Aspergillus niger.

Main application: clarification of white and rosé must and wine.

Dosage:

Application: static clarification

• 0,5-2 g/hL - Temperature: 5-12 °C - Time: 3-8 hours.

Application: flotation

• 1 g/hL - Time: at least 2 hours.

ENO&ZYMES SWEET PRESS

Enzymatic preparation for maceration on the skins of white grapes

SweetPress favours the release of aromas and aromatic precursors into the must, at the same time reducing the times for maceration on skins/pellicular maceration. Thanks to the secondary enzymatic activities generated by SweetPress, the grape skins become more fragile, which means that less pressure is needed in crushing. This all benefits the quality of the product. The use of SweetPress improves the filterability of wine.

Composition: granules with a high concentration of pectinases, purified by the activity of cinnamyl esterase and anthocyanase. Origin: Aspergillus niger.

Main application: maceration on the skins of white grapes.

Dosage:

• 3 g/q.

ENO&ZYMES RANGE

ENO&ZYMES AROM PRESS

Enzymatic preparation for maceration on the skins of white grapes

AromPress favours the release of aromas and aromatic precursors into the must, at the same time reducing the times for maceration on skins. Thanks to the secondary enzymatic activities generated by AromPress, the grape skins become more fragile, which means that less pressure is needed in crushing. This all benefits the quality of the product. The use of AromPress improves the filterability of wine.

Composition: granules with a high concentration of pectinases and beta-glycosidase secondary activities, preventing undesired activities. Origin: Aspergillus niger.

Main applications: maceration on the skins of aromatic white grapes.

Dosage

• 2-4 g/100 kgs - Temperature: 6-12 °C - Time: 12-14 hours.

ENO&ZYMES TRUE COLOR

Enzymatic preparation for maceration

TrueColour facilitates the release of anthocyanins into the must, which then remain stable even after aging. As well as showing improved colour, wines treated with this enzyme display a sensory profile which is intenser (red fruit), full-bodied and softer. The use of TrueColour improves the filterability of wine.

Composition: granules with a high concentration of pectinases and specific secondary activities, purified by the activity of cinnamyl esterase and anthocyanase. Origin: Aspergillus niger.

Main applications: maceration of red grapes.

Dosage:

Application: fermentation maceration

• 3-4 g/hL - Temperature: 20-28 °C - Time: 2-8 days.

Application: long fermentation maceration

• 4-5 g/hL - Temperature: 20-28 °C - Time: over 10 days.

Application: pre-fermentation cold maceration

• 2-3 g/hL - Temperature: 8-12 °C Time: 2-4 days.



100 g 500 g















FN7YMFS FNO&7YMFS RANGE

ENO&ZYMES AROM COLOR

Enzymatic preparation for maceration

AromColor facilitates the optimal and complete breakdown of the colour- and aroma-producing substances contained in grape skins. Thanks to its lack of aggressive secondary activities, AromColor does not encourage the release of astrigent or unpleasant substances. Moreover, its beta-glycosidase activity enhances the expression of aromas right from the earliest stages of winemaking. The use of AromColour improves the filterability of wine.

Composition: granules with a high concentration of pectinases and specific secondary activities (beta-glycosidase), purified by the activity of cinnamyl esterase and anthocyanase. Origin: Aspergillus niger.

Main applications: maceration of red grapes

Dosage:

Application: fermentation maceration

• 3-4 g/hL - Temperature: 20-28 °C - Time: 2-8 days.

Application: long fermentation maceration

• 4-5 g/hL - Temperature: 20-28 °C - Time: più di 10 days.

Application: pre-fermentation cold maceration

• 2-3 g/hL - Temperature: 8-12 °C - Time: 2-4 days.

100 g 500 g

ENO&ZYMES EVOLUTION PLUS

Enzymatic preparation for wine aging

EvolutionPlus accelerates the natural aging processes of wines by encouraging the release of mannoproteins that stabilize unstable colour components. Using EvolutionPlus leads to wines being ready for bottling more quickly and to a reduction in the amount of fining agents needed. The use of EvolutionPlus improves the filterability of wine.

Composition: granules with a high concentration of pectinase, specific secondary activities and β -glucanase $\beta(1-3)$, $\beta(1-6)$, purified by the activity of cinnamyl esterase and anthocyanase. **Origin:** Aspergillus niger and Trichoderma harzianium

Main applications: suitable for use during aging on all kinds of still and sparkling wines; also for treating Botrytis-infected grapes.

Dosage:

Application: when aging white wines

• 2-3 g/hL - Temperature: 8-16 °C - Time: at least 4 weeks.

Application: when aging red wines

• 4-5 g/hL - Temperature: 8-16 °C - Time: at least 4 weeks.

Application: for treatment of Botrytis-infected grapes

• 2-3 g/hL - Temperature: 10-14 °C - Time: 2-4 days.

Application: when aging still/sparkling wines

• 2-4 g/hL - Temperature: 8-12 °C - Time: at least 4 weeks.

100 g 500 g







500 g

ENO&ZYMES PROCESS EXTREME

Enzymatic preparation for static clarification and flotation

ProcessExtreme accelerates the clarification of musts and creates the best conditions for optimal fermentation. Wines produced from musts clarified using ProcessExtreme will display a fruitier, intenser sensory profile, and, thanks to its lack of negative secondary activity, the wines will also be free from phenol precursors. The smaller proportion of lees to the juice obtained from pressing also makes the whole process more cost-effective. The use of ProcessExtreme significantly improves the filterability of wine.

Composition: granules with a high concentration of acid pectinase, purified by the activity of cinnamyl esterase and anthocyanase. Origin: Aspergillus niger.

Main applications: clarification of white and rosé wines or maceration of white grapes. Use in difficult conditions with pH < 3 or problematic varieties.

Dosage:

Application: static clarification

• 0,5-2 g/hL - Temperature: 5-12 °C - Time: 3-8 hours.

Application: flotation

• 1 g/hL - Time: 2 hours at least.

500 g 0,1 kg - 10 kg





Thanks to its targeted, synergistic action, EnzyFlow hydrolizes all the molecules (pectins, colloids, glucans, etc.) that can hinder or slow the filtration process, thereby preserving the quality of the must or wine. Using EnzyFlow makes it possible to obtain must and wine that can be filtered at a lower pressure, reduce waste, limit the use of filtration adjuvants, reduce the amount of water needed for rinsing and, above all, increase the filtration yield.

Composition: granules with a high concentration of pectinase, specific secondary activities and β -glucanase $\beta(1-3)$, $\beta(1-6)$, purified by the activity of cinnamyl esterase and anthocyanase. **Origin:** Aspergillus niger **and** Trichoderma harzianium.

Main applications: improve filterability of musts and red, white, still and sparkling wines.

Dosage:

Application: for still wines

• 2-4 g/hL - Temperature: 10-16 °C - Time: at least 48 hours.

Application: for musts

• 3-5 g/hL - Temperature: 10-16 °C - Time: at least 48 hours.

Application: for effervescent/sparkling wines

• 2-4 g/hL - Temperature/Time: secondary fermentation conditions.







ZIMOPEC RANGE LIQUID ENZYMES

1 kg 20 kg

1 kg

20 kg

1 kg 20 kg

ZIMOPEC P110L

Enzymatic preparation for static clarification and flotation

Zimopec P110L performs an enzymatic action on soluble and insoluble pectins and helps reduce the viscosity of the product in a short timespan. The advantages of using Zimopec P110L are a greater yield of juice, a reduction in pre-filtration and/or pre-clarification waiting times, greater stability in the final product and a reduction in the quantities of fining agents required.

Composition: enzymatic preparation with pectolytic activity obtained from Aspergillus Niger.

Main application: suitable for the treatment of pressed grapes and must; its ability to completely break down pectins greatly facilitates later fining and filtration operations.

Dosage:

• 0,5-2 mL/hL.

ZIMOPEC PML

Enzymatic preparation for pellicular maceration

Grape pressing is one of the operations in the winemaking process with the strongest influence on both the quality of the final product and total production costs. Zimopec PML has been designed specifically to improve the results of this delicate procedure. The enzymatic action performed on soluble pectins means that the viscosity of the product is quickly reduced but without the skins breaking up at the same time.

Composition: enzymatic preparation with pectolytic activity obtained from Aspergillus Niger.

Main application: targeted product for optimization of grape-pressing operations without an excessive breakdown of solid matter.

Dosage:

• 3-5 mL/q.

ZIMOPEC PXL 09

Enzymatic preparation for maceration

The pectolytic and cellulase activity of Zimopec PXL 09 helps the extraction of colour, both in terms of quantity and quality. Zimopec PXL 09 effectively reduces the pectin content, with the result that the products treated have better filterability and are less susceptible to turbidity phenomena.

Composition: enzymatic preparation with secondary hemicellulase activity obtained from Aspergillus Niger.

Main application: Zimopec PXL 09 is recommended for the treatment of red grapes both in traditional winemaking and modern processes such as Flesh Detente and thermovinification in general.

Dosage:

• 3-5 mL/q.

ZIMOPEC FLOTTOFLASH

Enzymatic preparation for static clarification and flotation

Zimopec Flottoflash is a product developed for flotation. It has enzymatic 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 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.

Composition: enzymatic preparation with pectolytic activity obtained from Aspergillus Niger.

Main application: recommended for treatment during the grape must flotation phase.

Dosage:

• 1-5 mL/hL.

ZIMOPEC 2 FLOTTOFLASH

Enzymatic preparation for static clarification and flotation

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.

Composition: enzymatic preparation with pectolytic activity obtained from Aspergillus Niger.

Main application: recommended for treatment during the grape must flotation phase in the most difficult cases.

Dosage:

• 1-5 mL/hL.

ZIMOPEC CLEAR FLASH

Enzymatic preparation for static clarification and flotation

Clear Flash performs an enzymatic action on soluble and insoluble pectins and helps reduce the viscosity of the product in a short timespan. Moreover, the hydrolysis of pectic substances, which are known to act as protective colloids, means that products treated with Clear Flash display greater filterability.

Composition: enzymatic preparation with pectolytic activity obtained from Aspergillus Niger.

Main application: suitable for the treatment of musts; its ability to completely break down pectins greatly facilitates later fining and filtration operations.

Dosage:

• 1-5 mL/hL.































ZIMOPEC RANGE

ZIMOPEC PRESS FLASH

Enzymatic preparation for pellicular maceration

Performing pellicular maceration on white-wine grapes – especially the more aromatic varieties - has the great disadvantage of making the product difficult to filter because of the large quantity of pectins drawn out. Thanks to its pectolytic action, Zimopec Press Flash makes these kinds of musts notably easier to work with. The enzymatic action performed on soluble pectins lowers the viscosity of the must in a short time, without causing the skins to disintegrate.

Composition: enzymatic preparation with pectolytic activity obtained from Aspergillus Niger.

Main application: specially designed to enhance grape-pressing operations.

Dosage:

• 3-5 mL/hL.

ZIMOPEC COLOR FLASH

Enzymatic preparation for maceration

The pectolytic action performed by Color Flash makes it possible to lower pectin levels; as a consequence, the treated product displays greater filterability and is less susceptible to clouding and hazing.

Composition: enzymatic preparation with pectolytic activity obtained from Aspergillus Niger.

Main application: suitable for treating grapes destined for use in red wines.

Dosage:

• 3-6 mL/hL.

10 kg













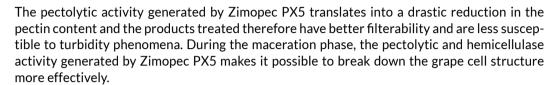


ZIMOPEC RANGE **GRANULAR ENZYMES**

10 kg

ZIMOPEC PX5

Enzymatic preparation to improve filterability



Composition: pectolytic enzymatic preparation with secondary proteolytic and hemicellulase activity, obtained from Aspergillus Niger.

Main applications: suitable for improving wine stability and filterability. When used during maceration, this product helps draw out the aromatic potential and the colour components of the grapes. For use making white or red wines.

Dosage:

• 1-3 g/hL.

OTHER ENZYMES

ZIMOPEC FREEAROM

Enzymatic preparation to facilitate the release of aroma precursors

As it performs pectinolytic and glucosidic enzymatic actions, Zimopec FreeArom facilitates the release of aroma precursors, which may have been partially glycosilated and therefore "not expressed" during the aging of young wines made from grapes such as Muscat, Gewurztraminer and Riesling.

Composition: enzymatic preparation with pectolytic and β -glucosidic activity.

Main application: reveal varietal aromas in white wines while aging.

Dosage:

• 5-13 g/hL.

0,5 kg

ENZYMES















Direct inoculation*

conditions that arise and on the winemaker's objectives.

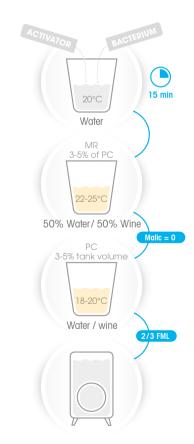
By choosing the right bacterium, re-activation process and inoculation technique (co-inoculation, early inoculation or sequential inoculation), the sensory profile of the wine can be guided towards the desired results.

MBR process
direct inoculation

| Sacrea | Contract | C

Inoculation with one-step

Standard reacclimatization (reactivation and acclimatization)



BACTERIA FOR MALOLACTIC FERMENTATION

DECISION CRITERIA



DIRECT-INOCULATION BACTERIA

25 hL 250 hL

LA CLAIRE MALO DIRECT



Targeted winemaking bacterium

This winemaking bacterium enables malolactic fermentation in white, red and rosé wines. It can be incorporated directly into the must or wine without being reactivated first. La Claire Malo Direct does not produce biogenic amines (this strain does not have the genes responsible for the decarboxylation of amino acids) and is particularly suited to co-inoculation with yeasts, as this heightens the efficacy of its kinetics. Used with this method, it also produces a very limited amount of diacetyl (buttery notes) and helps reveal and preserve fruity notes, in particular from esters. Undoubtedly the best bacterium to use in co-inoculation and when aiming for a fruity wine.

Composition: Oenococcus Oeni.

Main application: obtain fruity wines through co-inoculation.

Dosage:

• 1 g/hL.

BACTERIA WITH SHORT REACCLIMATIZATION TIME

25 hL 100 hL



Targeted winemaking bacterium

This bacterium is recommended in situations where the grapes being fermented are particularly ripe. It allows the aromatic purity of the wines to be preserved while considerably softening the effects of buttery notes, as it produces only very small quantities of diacetyl (it consumes small quantities of citric acid, and only after the malic acid has been completely used up). In numerous field tests, Kit La Claire Malica has also demonstrated its ability to reduce astringent and bitter notes in wines at the same time as enhancing the feeling of volume in the mouth. We recommend using early inoculation (at a density of approx. 1.010), as use of this technique allows the bacterium to exploit the favourable temperature of the wine and to protect red wines from *Brettanomyces* attacks.

Composition: Oenococcus Oeni bacterium and specially formulated activator containing deactivated yeast.

Main application: reduce astringency and limit buttery notes.

Kit La Claire Malica is a kit including:

- a preparation of selected lyophilized lactic bacteria;
- specially formulated activator to add to the must/wine when reacclimatizing the bacteria.

Dosage:

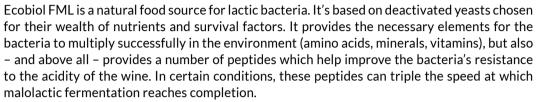
• 1 g/hL.

MALOLACTIC FERMENTATION STARTER

1 kg

ECOBIOL FML

MLF optimizer



Ecobiol FML is particularly effective in wines with a low pH (lower than 3.4).

Composition: dectivated yeast.

Main application: provide optimized nutrition in order to speed up malolactic fermentation.

Dosage:

• 20 g/hL.

45



PRODUCTS FOR GOVERNING BACTERIAL POPULATIONS

2,5 kg





MICRO GUARD LOW SOLUTIONS

To govern bacterial flora

Micro Guard is a totally *allergen-free* and GMO-free product designed to govern the bacterial flora both pre- and post-malolactic fermentation. Micro Guard is a new, technological adjuvant made from natural, plant-based ingredients. Its innovative blend of chitin-derived polysaccharides stabilizes red wines after completion of MLF without the onset of the classic diseases, and prevents

MLF from taking place in white and rosé wines where it is not desired. Micro Guard also allows Charmat-method base wines to be successfully preserved in low- SO_2 conditions, leading to an optimal start to secondary fermentation. This is an important advantage for winemakers who wish to work with low doses of sulphur. Moreover, Micro Guard limits any increases in volatile acidity caused by the acetic bacteria in the wine and has a fining/declouding effect.

Composition: chitosan from Aspergillus niger.

Main application: govern the bacterial flora both pre- and post-malolactic fermentation.

Dosage:

• 25-60 g/hL



PRODUCTS FOR GOVERNING BACTERIAL POPULATIONS

MICRO GUARD

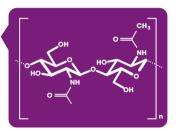
7

A TRULY INNOVATIVE PRODUCT: NATURAL, BIODEGRADABLE, NON-ALLERGENIC AND GMO-FREE, WITH NO ANIMAL-ORIGIN OR SYNTHETIC SUBSTANCES

Found in many living organisms, chitin is the most plentiful polysaccharide after cellulose. Of all the useful polysaccharides for humans, chitin and its main derivatives (chitosan and chitin-glucan) are becoming more and more popular. In 2003, KitoZyme developed an innovative manufacturing process based on the use of a source of chitin that was not animal-origin but plant-based.

KitoZyme and IOC work in partnership to offer innovative collage products which meet market expectations.

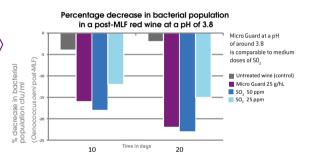
In 2009, only the new technology of manufacturing plant-based chitin derivatives was approved by the Italian Independent Assessment Body; the same products were then authorized for use by the EU in 2010.



N

GOVERNING THE POST-MLF STAGES IN RED WINES

When it comes to red wines, MLF is an important step in the vinification process. Upon completion of MLF, the remaining bacteria can quickly become harmful through increases in pentoses, glycerol and tartaric acid, leading to classic faults in the wine. The most popular treatment used to avoid these problems is sulphuring.

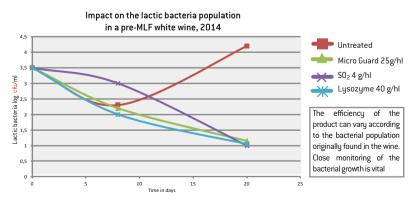


M

SLUGGISH OR STUCK MLF IN WHITE AND ROSÉ WINES

In white and rosé wines, MLF is quite often not required, as it has a significant effect on the flavour of the product, in particular making it more difficult to attain the desired level of freshness.

In sparkling wines produced using the Charmat method, it's crucial to keep the base wine that will be used for the secondary fermentation intact. The presence of lactic bacteria at this stage is highly risky, as they could compromise the integrity of the batch.



The result of the strategies and instruments developed by IOC to control oxidation and microbiological contamination during the pre-fermentation, fermentation and fining stages, MICRO GUARD is a precious addition to the winemaker's toolbox as it allows them to reduce SO₂ levels.



46

VINIFICATION **AND FINING**

Pre- and post-fermentation stages

In order to attain a high level of oxidative resistance, it's vital to act before embarking on the vinification process – after pressing, and before fermentation. Fining musts limits their oxidability and leads to fresher, fruitier profiles in white and rosé wines. This process can be carried out through static fining or flotation. Fining removes the by-products of oxidation which cause browning and can constitute 'aroma traps'. However, during the fining process, not only are the levels of oxidation by-products - orthodiphenols and catechins - reduced, but also the turbidity of the product. It's also an early colloid-stabilization process which helps keep wine clear over time. Fining brings attractive and repulsive forces into play, in accordance with the electrical charge of the molecules: the potential efficacy of a fining agent depends on its charge density, or in other words on its affinity for the molecules with an opposite charge it needs to remove. The Research & Development team at Perdomini constantly seeks even better fining solutions using Turbiscan R technology - this allows our experts to monitor the evolution of the clarity of a wine put through a fining process.

Bentonite clays

When exposed to heat, the original grape proteins in white and rosé wines can lead to cloudiness in the bottle. This risk can be successfully avoided by using bentonite clays belonging to the Montmorillonite family. At the end of the alcoholic fermentation process, élevage sur lies reduces protein instability, but the only truly effective treatment to remove the protein aggregates that cause cloudiness is to use bentonite clay. Macro-molecules made up of amino acids and proteins with a positive charge at the pH of the wine will interact with the clay which, when suspended in the liquid, will take on a negative charge. The density of the protein-bentonite particle aggregates is greater than the density of the wine and the flocs precipitate. Targeted testing can be carried out before bottling to establish the risk of protein clouding. The most popular test is the heat test, which involves measuring the difference in turbidity after the wine has been heated to 80°C for 30 minutes. The wine can be considered stable when the delta is less than 2 NTU. From a purely practi-

cal point of view, the greater the clay's capacity to swell in water, the more efficient it will be at removing proteins.

Various types of bentonite clay are available:

Natural bentonite

- Sodium bentonite clays: the cation with the greatest ion-exchange capacity is sodium, a reactive element; the clay swells considerably.
- Calcium bentonite clays: the cation with the greatest ion-exchange capacity is calcium; its swelling and adsorption properties are lesser than the sodium-based clay but it's highly effective at compacting lees.

Activated bentonite

In order to enhance their adsorption capacities, calcium-based clays undergo an activation process using sodium carbonate or sodium hydroxide (depending on the proportion of sodium ions), which are highly reactive and swell considerably. Their immediate effect is equal to or greater than that of sodium bentonite clays, but they show less stability over time.

BENTONITE CLAYS

10 kg

PENTAGEL

Activated sodium bentonite



Suitable for removing lees from must and for fining and stabilizing wines. When added at the fining stage, Pentagel removes protein compounds, phenolic compounds and part of the pectic substances. When added at the earliest stages of fermentation, it not only performs a clarifying action, but also has a positive impact on the fermentation process.



Composition: activated sodium bentonite.

Main application: clarification of must and wine.

Dosage:

- 20-30 g/hL of must
- 10-20 g/hL of wine.

ANTI-OXIDATION TREATMENTS

1 kg 19.96 kg

PVPP V

Adsorbent of polyphenolic compounds



PVPP V has the power to eliminate the phenolic substances which cause browning and/or organoleptic defects in certain wines as well as certain molecules that make musts and wines

Composition: powder polyvinylpolypyrrolidone.

Main application: clarification of white and red wines.

Dosage:

- 5-10 g/hL of white wine.
- 10-50 g/hL for oxidized red and white wines.

Legal limit: 80g/hL.



1 kg

PVPP Granulated has the power to eliminate the phenolic substances which cause browning and/or organoleptic defects in certain wines as well as certain molecules that make musts and wines bitter.

Composition: granular polyvinylpolypyrrolidone.

Main application: clarification of white and red wines.

Dosage:

• 20-70 g/hL

Legal limit: 80g/hL.

METALCLEAN

Fining and stabilizing product containing PVI-PVP

Fining agent with the power to simultaneously eliminate large amounts of metals (it has great affinity in particular with copper) from musts and wines and act on potentially oxidizable molecules, thereby preventing oxidation and general deterioration phenomena from occurring both through direct action and indirect effects, i.e. when metals are removed, they no longer catalyse reactions.

Composition: PVI-PVP, yeast hulls, chitin derivatives from Aspergillus niger.

Main applications: lower the levels of copper and other metals, prevent oxidation responses and pinking effect occurring in white wines at risk.

Dosage:

• 30-80 g/hL

PVI/PVP

Fining and stabilizing product

Polyvinylimidazole and polyvinylpyrrolidone copolymer to reduce the levels of heavy metals in must and wine and to prevent oxidation responses.

Composition: PVI-PVP

Main applications:

- In musts: to reduce the levels of heavy metals (especially copper and iron) and consequently prevent oxidation responses and the risk of cloudiness arising from these.
- In wines: to reduce the levels of heavy metals and to prevent oxidation responses and avoid pinking effect in wines considered at risk.

Dosage:

• 10-50g/hL.

Legal limit: 50 g/hL.

ANTI-OXIDATION TREATMENTS

CLEAR GT-F

Composite fining agent for flotation

The association between pea protein, silica gel and PVPP provides for rapid flotation and the effective removal of oxidised and oxidisable phenols, improving the final organoleptic balance. Clear GT-F also acts effectively in reducing the pinking phenomenon and stabilises and enhances the fruity flavour. Clear GT-F provides excellent clarification through flotation in a single treatment, leading to a reduction in direct and indirect costs.

Composition: pea protein, silica gel and PVPP.

Main application: rapid and optimal flotation.

Dosage:

• 10-100 g/hL

CLEAR GT-R

Composite fining agent for red must

Clear GT-R allows the winemaker to remove astrigency, vegetal notes and unstable polyphenols without negatively impacting the colour of the wine. It also stabilizes and enhances fruity notes. Must clarification is a fundamental point during the winemaking process and Clear GT-R reduces both the direct and indirect clarification costs in one single treatment.

Composition: targeted yeast hulls, pea protein and silica gel.

Main application: clarification of red must.

Dosage:

• 10-30 g/hL

CLEAR GT-W

Composite fining agent for white must

Clear GT-W's clarification action is suitable in preventing oxidative phenomena, pinking, protein cloudiness and the formation of bitter flavours in white wines, establishing and enhancing the fruity taste. Must clarification is a fundamental point during the winemaking process and Clear GT-W reduces both the direct and indirect clarification costs in one single treatment.

Composition: PVPP, pea protein and bentonite.

Main application: clarification of white must.

Dosage:

• 10-40 g/hL











ANTI-OXIDATION TREATMENTS

ANTI-OXIDATION TREATMENT

10 kg

15 kg

P-CELL

Composite fining agent

Composite fining and stabilizing agent and useful fermentation regulator. The fining action of P-Cell is suitable for preventing future oxidation, colour decay protein turbidity and the formation of bitter flavours. Fermentation is the best time to use P-Cell, as in this way it is possible to take advantage of the presence of a-cellulose fibres which function both as support to the yeast cells, as well as adsorbent substances inhibiting yeast metabolisms that may be present in the must.

Composition: PVPP. α-cellulose, activated bentonite.

Main application: clarification of must during fermention.

Dosage:

50-120 g/hL

P-FRESH

Composite fining agent

P-Fresh is a clarifier with high fining power that allows simplified filtration, improved colour stability and the elimination of oxidized and oxidisable phenols. Thanks to the presence of activated carbon, P-Fresh is ideal for the clarification of white wines. In addition, P-Fresh combines the qualities of plant proteins with the well-known fining capacity of isinglass, presenting itself as an optimal response to meet the need for a high quality fining agent made from carefully selected raw materials.

Composition: plant proteins, activated vegetable carbon, isinglass.

Main application: clarification of must and wine.

Dosage:

• 30-60 g/hL

P-GREEN

Composite fining agent

When used in must and in white and red wines, P-Green shows a remarkable ability to clarify the liquid, leading to a significant reduction in the oxidized and oxidizable polyphenol content. As it doesn't contain bentonite, the winemaker can deal with protein stabilization separately. Containing plant-based proteins and isinglass, P-Green is the perfect choice for anyone creating allergen-free products and, thanks to our careful selection of base materials, has the necessary characteristics to be used to fine quality wines.

Composition: plant proteins, isinglass.

Main application: clarification of must and wine.

Dosage:

• 20-80 g/hL

P-STAR

Composite fining agent

P-Star effectively combats unstable colloids and also impacts proteins - by combining unstable polyphenol-based particles and making them precipitate, it avoids the onset of browning and the combination of proteins and tannins. The synergistic action of the components in P-Star plays a decisive role in eliminating the risk of future oxidation, protein clouding, pinking and the creation of bitter notes.

Composition: PVPP, activated bentonite, isinglass.

Main application: clarification of must and wine.

Dosage:

• 30-80 g/hL

POTASSIUM CASEINATE

Potassium-caseinate-based fining agent

Through an adsorption mechanism, this fining agent is able to react with both polyphenolic substances and metals - iron and copper in particular. The flocs thus formed precipitate quickly and form a compact deposit.

Composition: potassium caseinate.

Main applications: particularly recommended for the prevention and treatment of oxidative faults in wines.

Dosage:

- 50-100 g/hL of must.
- 20-80 g/hL of white wine.
- 10-70 g/hL of red wine.

CASEO CELL

Potassium-caseinate-based fining agent

The optimum balance of proportions between the three active principles makes Caseo Cell an excellent fining agent and a useful fermentation regulator. Caseo Cell is highly soluble and does not leave the product with foreign odours or tastes.

Composition: bentonite, potassium caseinate, α -cellulose.

Main application: clarification of must during fermentation.

• 50–120 g/hL according to the circumstances and operating conditions.

1 kg

20 kg























ANTI-OXIDATION TREATMENTS

1 kg

CASEO SOL

Potassium-caseinate-based fining agent

Caseo Sol acts on colour keeping it stable over time. Caseo Sol can substitute carbon colour removers when there are slight colour defects to be corrected and it does not strip the wine of its natural aromas. Caseo Sol also acts against metal ions, especially iron and copper, meaning that it can prevent symptoms of chemical and physical instability such as copper casse and ferric phosphate casse.

Composition: potassium caseinate, potassium bicarbonate.

Main application: used to clarify white wines, it helps to attain prolonged stability without affecting the organoleptic properties of the product.

Dosage:

- 20 g/hL as an additive to metal-removal treatment in conjunction with potassium ferrocyanide.
- 40-60 g/hL as a stabilizer for white wines with overly intense colour.
- 80-100 g/hL as a treatment to combat oxidation phenomena.

1 kg 25 kg

CASEO STAR

Potassium-caseinate-based fining agent

Treating white musts with the Caseo Star fining agent allows you to improve the colour quality of the finished product, prevent oxidization reactions affecting the flavans and avoid the most common forms of instability, such as ferric phosphate casse, copper casse, clouding and protein deposits. Using Caseo Star is particularly helpful in maderized wines, where it re-establishes the colour balance by inducing the oxidized phenols (which cause the colour of the wine to darken) to precipitate.

Composition: potassium caseinate, activated bentonite.

Main applications: Caseo Star has been designed to simultaneously attain both the removal of unstable phenolic substances and a drastic reduction in proteins.

- 30-50 g/hL for still wines, including dessert wines.
- 80-100 g/hL for hard-to-fine must and wine.

25 kg















RIDDLING ADJUVANTS

10 L

REMUAGE 1

Fining and stabilizing agent for riddling



This product encourages the sedimentation of solid particles in the bottle. This deposit, made less powdery and more compact, easily floats down to the neck of the bottle during riddling. The intense fining power of the bentonite clay improves the clarity of the wine, giving it added sparkle.

Composition: bentonite-clay-based preparation.

Main application: facilitates the riddling of sparkling wines. Can be used both for traditional and automatic riddling.

Dosage:

• 70-80 mL/hL.

1 L

REMUAGE 2

Fining and stabilizing agent for riddling



This product simplifies fining and sedimentation in sparkling wines. Made of a specially selected pure bentonite clay and a silicate, it displays exceptional fining and sedimentation properties – even in difficult conditions. With Remuage 2, sediment is compact and easy to remove, leaving the wines clear and bright. Remuage 2 can be used effectively with both manual and automatic riddling.

Composition: sodium bentonite, silicate solution

Main applications: attain compact sediment in both manual and automatic riddling operations.

Dosage:

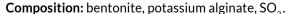
• 60-80 ml/hL

REMUAGE EVOLUTION POWDER

Fining agent for riddling



A blend of specially selected bentonite clays with low deproteinizing power which forms a non-sticking skin-like sediment. The low-viscosity alginate ensures cohesion between the bentonite blend and the yeast. When incorporated into wine, Remuage Evolution Powder totally absorbs the yeast and isolates it from the sides of the bottle.



Main application: fining agent for riddling sparkling wines made using the traditional method.

Dosage:

• 70-90 ml/hL.



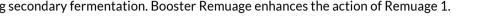
ALTERNATIVE SOLUTION

1kg - 5 kg 15 kg

BOOSTER REMUAGE

Tirage adjuvant for riddling

Tirage adjuvant which increases the compactness and speed of expulsion of the deposit formed during secondary fermentation. Booster Remuage enhances the action of Remuage 1.



Composition: kaolin solution, diammonium phosphate, citric acid, SO₂.

Main application: facilitates the riddling of sparkling wines. Can be used both for traditional and automatic riddling.

Dosage:

• 20-30 ml/hl.

The following dosage is recommended:

- Booster Remuage: 20 mL/hL
- Remuage 1: 60 mL/hL

OPERA TIRAGE L

Riddling adjuvant

Opera Tirage L is a blended formula in solution form which helps preserve the sensory qualities of sparkling wines. Facilitates the agitation and fining of bottled wines. Also useful to prevent or treat residual flavours.

Composition: gallic tannin in solution form, copper sulphate, SO₂.

Main applications: improves the aging power of wines and reinforces the antioxidant action of sulphur dioxide.

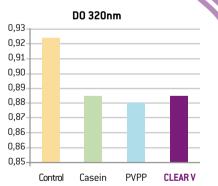
Dosage:

• 20-40 ml/hL.

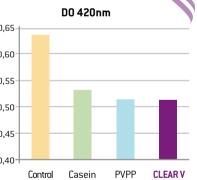
1 L



Effect on oxidizable polyphenols (quinones)







CLEAR V

Plant-based protein fining agent

Clear V is a 100% plant-based protein extracted from peas, selected for its reactivity to oxidized and oxidizable phenolic compounds, its efficacy in flocculating suspended matter and making it precipitate, its sensory qualities and its ease of use. To make it even more effective, it can be used in tandem with a fining agent, such as bentonite clay, silica gel or a tannin. When combined with a special winemaking carbon, the treatment is further enhanced and sedimentation takes place even more rapidly.

Composition: pea protein.

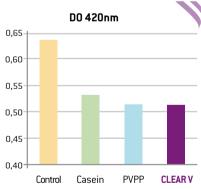
Main application: clarification of must and wine.

Dosage:

- 20-40 g/hL to treat white and rosé must during fining or winemaking, depending on the health of the grapes
- 30-50 g/hL to treat grapes in the press
- 10-20 g/hL in white and rosé must undergoing flotation, or to fine white, rosé and red wines

Treatment of a Grenache rosé must during fining – Dosage of 30g/hl for each modality

Effect on "yellow" in the must





ALTERNATIVE SOLUTION

CLEAR V FLOT

FLOTATION



Vegetable-protein-based liquid fining agent

Particularly suitable for the preventive treatment of musts easily oxidable, used in wine, Clear V Flot significantly increases resistance to oxidation, improves the organoleptic qualities, reduces the sensation of bitterness and eliminates vegetal or herbaceous notes of wines subject to oxidase cases. In flotation it guarantees a good separation and compaction of the sediment.





22 kg

1000 kg

Composition: pea protein in a colloidal solution, tartaric acid, SO₂.

Main applications: static clarification and flotation of white and rosé musts.

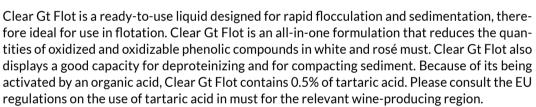
Dosage:

• in white and rosé must: from 100 to 800 mL/hL depending on harvest health.

• in flotation: 50-100 mL/hL • in white wines: 50-150 mL/hL • in red wines: 100-200 mL/hL.

CLEAR GT FLOT

Liquid fining agent for use in flotation



Composition: carbon, pea protein, bentonite, tartaric acid, SO₂.

Main application: flotation of white must.

Dosage:

50–150 mL/hL.

22 kg 1000 kg





FOR

FLOTATION



VEGAN-FRIENDLY CHITOSAN-BASED FINING AGENTS

PK FLOT

Fining and stabilizing agent

PK Flot is the result of combining chitosan and pea protein in an aqueous solution, making it ready for use. The special fungal-origin chitosan contained in PK Flot displays a high density charge, meaning it enables rapid flocculation and sedimentation. The synergy between the chitosan and a pea protein selected because of its level of reactivity to phenolic compounds leads to a distinct improvement in sensory properties, as bitter sensations and excessive astringency are eliminated.

Composition: chitosan from Aspergillus niger, pea protein, tartaric acid.

Main applications: clarification and stabilization.

Dosage:

• 10-30 cL/hL

PK SOL M

Fining and stabilizing agent

Fining and stabilizing agent based on chitin in synergistic co-formulation with PVPP and isinglass. PK Sol M reduces the risk of formation of browning and protein-tannin compounds by rapid flocculation and sedimentation. PK SOL M is also able to reduce the effects caused by poor storage and tone down notes that are too pronounced and/or the presence of bitter flavour, restoring the

aromatic richness of the original product.

Composition: PVPP, chitosan from Aspergillus niger, isinglass.

Main applications: clarification and stabilization of white, red and rosé wines.

Dosage:

• 10-60g/hL depending on the circumstances and operating conditions.















VEGAN-FRIENDLY CHITOSAN-BASED FINING AGENTS

10 kg

PK SOL M2

Fining and stabilizing agent





(K)

PK SOL M2 is a formulation designed to prevent future oxidation phenomena, colour decay and the formation of bitter tastes. PK SOL M2 is also able to reduce the effects caused by poor storage; by acting on the oxidised components it makes it possible to tone down notes that are too pronounced and/or the presence of bitter flavour, restoring the aromatic richness of the original product.

Composition: PVPP, chitosan from Aspergillus niger, pea protein.

Main applications: clarification and stabilization of white, red and rosé wines.

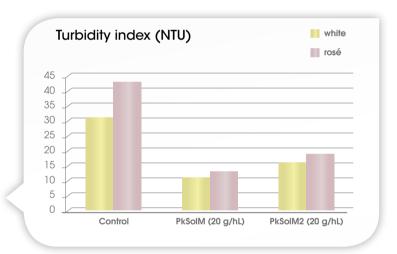
• 10-60g/hL depending on the circumstances and operating conditions.



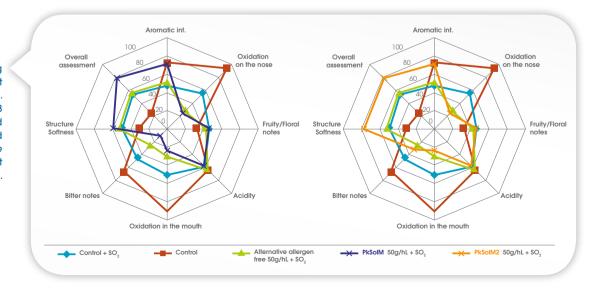
The clarifying effects of PkSolM and PkSolM2 make it possible to achieve clear wines quickly. Their efficacy comes from the components making up their formulas: the restorative power of chitin derivatives on the colour of oxidised wines combined with a number of compounds providing clarifying effects leads to exceptionally clean, stable wines. PkSoIM2 also contains a top-quality isinglass for even brighter wines.

The PkSoIM2 formulation is suitable for vegan diets.

NTU of a white wine and a rosé wine treated with 20g/hl of PkSoIM and 20g/hl of PkSolM2



Blind tasting with 8 expert tasters 7 out of the 8 tasters judged PkSoIM and PkSoIM2 to be the best formulations.



FINING AGENTS

10 kg

LUMYCLEAN PLUS

Stabilizer for must and wine





Lumyclean Plus can be used on both must and wine to remove oxidized and oxidizable polyphenols. When making white and red wines, it can be used both as a preventive and a curative treatment in order to prevent oxidative degradation or to 'rejuvenate' oxidized wines, helping them regain their freshness. 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 Plus has also been formulated as a defence against the 'light-struck taste' which can occur in white and rosé wines bottled in colourless glass. This defect is the result of the photoreduction of riboflavin (a photosensitive molecule) following exposure to natural or artificial light.

Composition: activated vegetable charcoal, silica gel.

Main applications: removal of oxidized and oxidizable polyphenols, reduction in riboflavin content.

Dosage:

• 5-10 g/hl, depending on needs and working conditions.



FINING AGENTS (PROTEINS)

ALTERNATIVE SOLUTIONS

1 kg 10 kg

Yeast-derived fining agent

Ypro is a protein-rich yeast extract which has undergone a rigorous selection and purification process. It displays exceptional clarifying ability and brings about rapid sedimentation. The proteins extracted from the yeast are highly concentrated and have a high molecular weight (over 15 KDa), which makes them ideal for creating clearer

wines. Ypro refines the wines by eliminating any hard or bitter notes, while at the same time preserving their positive aromatic profile.

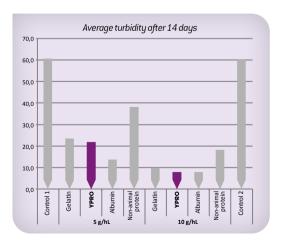
Composition: protein-rich yeast extract.

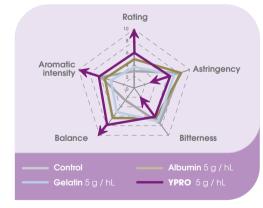
Main application: clarification of white, red and rosé wines.

• for white and rosé wines: 5-15 g/hL.

• for red wines: 5-30 g/hL.

Fining of a red wine (Merlot) produced using thermovinification (Languedoc Roussillon).





Analysis of turbidity (in NTU) after 14 days of fining at room temperature in the laboratory.

Sensory analysis after 14 days of fining at room temperature in the laboratory (blind tasting performed by 6 expert wine tasters).

FINING AGENTS

PRODUCTS CONTAINING PORCINE GELATIN

1 kg 20 kg

ATOMIZED GELATIN (COLD SOLUBLE)

Fining agent

This gelatin is particularly suited when, together with fining, the primary purpose is to achieve a good tannin balance. Indeed the action of Atomized Gelatin is particularly effective in the removal of tannins responsible for astringency and a bitter taste. During must clarification, when combined with bentonite or silica sol, we achieve must clarification and an effective reduction of phenolic substances in general.

Composition: porcin gelatin.

Main applications: clarification and stabilization of white and rosé wines lacking in brightness and softness.

Dosage:

• 5-25 g/hL.

1 kg

POWDERED GELATIN (HOT SOLUBLE)

Fining agent

In white and rosé wines, treatment with Powdered Gelatin, combined with bentonite or silica sol (xiles), easily removes unstable oxidised phenolic compounds, often the cause of a reduction in chromatic characteristics. Furthermore, thanks to its high gelling power, it is particularly suitable for the clarification of white and red must.

Composition: porcine gelatin.

Main application: rapid drop in turbidity and formation of compact sedimentation.

Dosage:

- 5-15 g/hL in musts and red wines.
- 3-10 g/hL in white and rosé wines.

ISTANT GEL

Fining agent

The action of Istant Gel is particularly directed to the phenolic substances, in this way the clarification makes it possible to achieve greater stability in regard to oxidative alterations. In wines that are excessively astringent, the use of Istant Gel allows to remove the tannins responsible for this flaw, by bringing more balance to the organoleptic profile of the product.

Composition: 30% porcine gelatin in an aqueous solution, SO₂.

Main application: suitable for clarifying treatments of musts and wines.

Dosage:

- 5-15 g/hL as an adjuvante for clarification.
- 15-30 g/hL as a colour stabilizer in red wines.
- 30–80 g/hL as tannin-remover according to the content of tannin.























FINING AGENTS

ISTANT GEL 45

25 kg

Fining agent

Istant Gel 45 carries out its action by reacting with tannins present in musts and wines. The interaction causes the formation of large floccules that fall, allowing the clarification of the product. Instant Gel 45 is therefore a valuable adjunct to be used in the process of must clarification, especially if it is particularly tannic, or to complete a spontaneously insufficient clarification. Its use has proved valuable in situations where normal gelatins are unsatisfactory.



Main application: suitable for clarifying treatments of musts and wines.

Dosage:

• 5-30 g/hL.

PRODUCTS CONTAINING ISINGLASS

1 L 10 L



BRILLIANCE LIQUID Fining agent containing isinglass

Adding Brilliance Liquid to wine enables the flocculation and sedimentation of suspended particles. Together with a long decantation process, it constitutes one of the best methods for fining and stabilizing wines. It also increases filterability.





Composition: isinglass.

Main applications: clarification and stabilization of white and rosé wines.

Dosage:

• 10-12 cL/hL.



FINING AGENTS

PRODUCTS CONTAINING EGG ALBUMIN

25 kg

OVOCLAR

Fining agent made from egg albumin



The reactivity of Ovoclar with tannin compounds allows it to be used in the clarification of red wines, especially at the end of barrique ageing. The action of Ovoclar is manifested by the elimination of the oxidised colouring material and with a marked decrease in tannic substances. In white wines, the use of Ovoclar is recommended for products that have undergone maceration or a long period of aging in wood.

Composition: egg albumin.

Main applications: organic fining agent for treating wines.

Dosage:

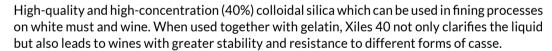
- 5-10 g/hL in white wines.
- 10-25 g/hL in red wines.

COLLOIDAL SILICA

25 kg - 1300 kg in bulk

XILES 40

Colloidal silica





Composition: 40% colloidal silica dioxide solution.

Main application: used in fining processes on white must and wine.

Dosage:

- 30-70 g/hL in must, together with 15-30g/hL of Istant Gel.
- 15-30 g/hL in wine, together with 3-10g/hL of Istant Gel.









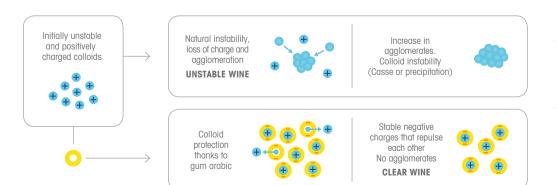
Winemakers are well aware of the need to stabilize tartrates, colloids, proteins and colour. Perdomini provides a complete range of stabilization aids for each contingency that can arise in a certain wine and/or when using a certain stabilization method

Unstable colloids

GUM ARABIC: STABILIZATION/PROTECTION

Gum arabic and colloid stabilization

When the wine is ready for bottling, the winemaker needs to perform chemical, sensory and stability tests in order to be sure that the wine will maintain its level of quality over time. Gum Arabic is an important ally in the quest to stabilize wines. It's a natural exudate from the bark of the acacia tree and is used as a 'stabilizer' for unstable colloids in wines. It improves their overall aromatic profile and mouthfeel, intensifies sensations of sweetness and roundness in the mouth and reduces astringency. It also reduces the risk of iron and copper casse marring the wine.



GUM ARABIC: STABILIZATION/PROTECTION

As it is a protective colloid, it combats the precipitation of suspended particles and absolutely must be used on "pre-setting" wines, i.e. wines which have been clarified and stabilized or are at the final stages of filtration. The gum arabic should be incorporated into the wine the day before the final filtration before bottling, or after the final filtration, in this case using a high-precision metering pump. Regulation EU 2019/934 lays down that the maximum dosage of gum arabic allowed is 30g/hl of dry matter. The precise dosage varies according to the desired sensory results and the level of instability in colouring substances measured after fining and initial filtration. To measure this instability, we recommend performing a cold-resistance test by chilling a sample of the wine to 4°C for 48 hours.

Colouring substance stability test

- Measure the turbidity of the initial sample (NTU before exposure to cold).
- If the turbidity is > 2 NTU, filter 30ml using a 0.65 μ m membrane.
- Put these 30ml (whether filtered or not) into a bottle and leave at 4°C for 48 hours.
- At the end of this time, shake the bottle then, after 15 minutes at room temperature, measure the turbidity of its contents (NTU after exposure to cold).

Δ NTU = NTU after cold - NTU before cold

Adding gum arabic is highly useful in wines with instability levels under $30\,\Delta\,\text{NTU}.$



STABILIZATION

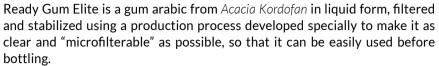
GUM ARABIC: STABILIZATION/PROTECTION





READY GUM ELITE

Stabilizing gum arabic



Ready Gum Elite helps avoid precipitation of colour particles and lend wines greater drinkability, roundness and smoothness.



Main application: for treating not only white, red and rosé wines but also fortified wines, in any situation where the winemaker wants to avoid precipitation of colour particles after bottling.

Dosage:

- 30-80 g/hL to avoid precipitation of colour particles.
- 50-100 g/hL to achieve the desired sensory characteristics.



the levorotatory gum arabic that can be used in microfiltration.

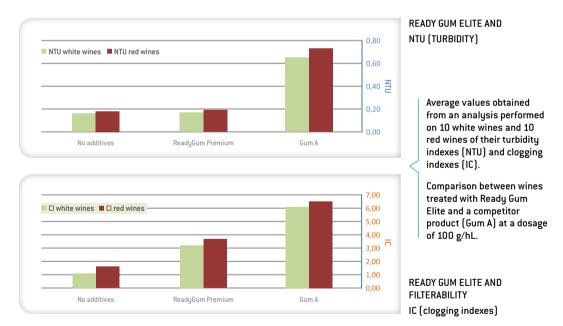


TABLE OF SUMMARY OF THE MAIN SENSORY CHARACTERISTICS AND APPLICATIONS

| 7 | ReadyGum 20 | ReadyGum ELITE | ReadyGum L |
|--------------------|-------------|-------------------|------------|
| Softness | | 0000 | |
| Body | 000 | 0000 | 0000 |
| Tartrate stability | 0000 | 00 | 00 |
| Colour stability | O | 0000 | 00000 |

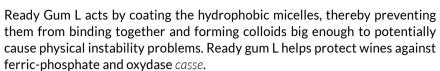
STABILIZATION GUM ARABIC: STABILIZATION/PROT

10 kg - 25 kg 200 kg - 1000 kg





READY GUM L





Composition: gum arabic from Acacia Kordofan in 20% water solution, SO₂.

Main application: for treating not only white, red and rosé wines but also fortified wines, in any situation where the winemaker wants to avoid precipitation of colour particles after bottling.

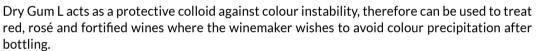
Dosage:

- 30-60 g/hL to avoid precipitation of colour particles.
- 50–100 g/hL to achieve the desired sensory characteristics.

1 kg

DRY GUM L

Levorotatory gum arabic in powder



The unique polysaccharide nature of Dry Gum L means it lends greater structure and more rounded aromas and flavours to the wine with very little clogging.

Composition: gum arabic from Acacia Kordofan.

Main application: protective colloid against colour instability recommended for treating red, rosé and fortified wines, in any situation where the winemaker wants to avoid precipitation of colour particles after bottling.

Dosage:

• 10-100 g/hL.











GUM ARABIC: TARTARIC STABILIZATION

10 kg - 25 kg 200 kg - 1100 kg



READY GUM 20

Stabilizing gum arabic

Gum arabic from Acacia Seyal in liquid form, filtered and stabilized using a production process developed specially by our internal research team in order to make it as clear and 'microfilterable' as possible, so that it can be easily used before bottling.



In young wines marked by excessive astringency, Ready Gum 20 masks the excessive tannicity and re-establishes the right balance of flavours. In well-balanced but rather thin wines, it lends body and fullness.

Composition: gum arabic from Acacia Seyal in 20% water solution, SO₂.

Main application: recommended for treating white, red and fortified wines, whenever it is necessary to avoid clouding, flocculation or precipitation after bottling.

Dosage:

- 40–100 g/hL to prevent tartrate instability.
- 50-200 g/hL or more to achieve the desired sensory characteristics.



Dextrorotatory gum arabic in powder

Dry Gum R acts as a protective colloid by wrapping around hydrophobic micelles and stopping them from aggregating into macromolecules large enough to cause physical instability in the wine. Its formulation as a powder means that the winemaker can enjoy all the advantages of a high-quality gum arabic without the addition of water, SO₂ or citric acid.



Main application: recommended for treating white, red, rosé and fortified wines, whenever it is necessary to avoid clouding, flocculation or precipitation after bottling.

Dosage:

• 10-100 g/hL.

1 kg 10 kg



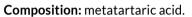


TARTRATE AND CALCIUM STABILIZATION

METACREMOR 40+

Metatartaric acid

Tartrate stabilizer that acts by wrapping around tartrate crystals, thereby stopping the growth of microcrystals and their subsequent precipitation. Its high degree of esterification guarantees great efficacy on both potassium bitartrate and calcium tartrate, so that the wine will remain stable for the whole winter period.



Main application: tartaric stabilization.

Dosage:

• 10 g/hL max.

METACREMOR INSTANT

Metatartaric acid

Tartrate stabilizer formulated in response to the needs of wineries where it's impossible to wait 48 hours or more before bottling. Metacremor Instant avoids the problem of clouding in wines after metatartaric acid with a high degree of esterification (> 40) has been added (although this is a totally normal phenomenon that disappears within 48 hours).

Composition: metatartaric acid.

Main application: tartaric stabilization.

Dosage:

• 10 g/hL max.

CREAM OF TARTAR

Crystallizer

Composition: micronized potassium bitartrate.

Main application: induce bitartrate crystal precipitation when cold-stabilizing wines.

Dosage: varies according to needs and the tartrate-stabilization system employed.

1 kg 15 kg









1 kg 15 kg













TARTRATE AND CALCIUM STABILIZATION

5 kg 15 kg

CALCIUM TARTRATE

Tartaric stabilizer

Calcium Tartrate makes it possible to achieve effective tartar stabilization by stabilizing both potassium bitartrate and calcium tartrate in a single step.

Composition: purified calcium tartrate tetrahydrate.

Application: encourage tartar precipitation and help stabilize the tartrates in the wine by decreasing the final concentration of potassium bitartrate and calcium tartrate.

Dosage:

• 100-200 g/hL

CRISTAL CREMOR S

Tartaric stabilizer

Using Cristal Cremor S is an effective way to optimize the practice of stabilizing wines through refrigeration, as it ensures tartrate stability and speedy completion.

Composition: combined potassium tartrates to boost the effects of superfine diatomaceous earth.

Main application: adjuvant for cold stabilization of tartrates.

Dosage:

• 30-60 g/hL depending on the total acidity of the wine to be treated.

1 kg





5 kg

STABILIZATION

CRYSTAL BALANCE

Carboxymethylcellulose (CMC)

Crystal Balance is a protective colloid that inhibits the formation (or nucleation) and subsequent growth of tartrate crystals in wine. It's a polysaccharide with a delicate balance between its degree of polymerization, degree of substitution and uniformity, so that the wine will be successfully stabilized with a low viscosity and very little gel formation.

Composition: carboxymethylcellulose.

Main application: adjuvant for tartrate stabilization.

Dosage: the dosage generally used ranges from 5-10g/hL, with a maximum permitted dosage of 10g/hL.

20 kg

CRYSTAL BALANCE SOL. 5%

Carboxymethylcellulose (CMC) in solution

Crystal Balance sol. 5% is a protective colloid that inhibits the formation (or nucleation) and subsequent growth of tartrate crystals in wine. Crystal Balance sol. 5% comes in a readymade solution for speed and ease of use. Not recommended when the wine has been or will be treated with lysozyme.

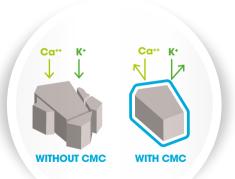
Composition: carboxymethylcellulose, SO₀.

Main application: adjuvant for tartrate stabilization.

Dosage: 100-200 mL/hL

Maximum permitted dosage: 200 mg/L.

One of the main properties of CMC is that it can inhibit the formation of tartrate microcrystals. Acting as a protective colloid, it blocks the growth of crystals and stops tartrate salts from precipitating. It's not advisable to add CMC to red wines, as it interacts with the phenolic compounds. When used on white wines, the wine must display total protein stability. We recommend performing a preliminary heat test to be sure that the proteins in the wine are stable. CMC is incompatible with wines treated with lysozyme. It's advisable to add the CMC to the wine 48 hours before the final filtration before bottling, otherwise it could clog up the filter cartridges. The maximum dose allowed by law is 100mg/L.



72

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TREATMENTS TO CORRECT SPECIFIC DEFECTS

DECOLOURIZING CARBON

10 kg

CARBON L

Vegetable decolourizing carbon

Carbon L is an activated, vegetable, black carbon in liquid form used for removing colour from musts and stained or over-oxidised wines. Carbon L is an inert, active highly absorbent charcoal in a 200/L aqueous solution. Its considerable internal surface area (around 1300 to 1400 m²/g) gives it a high capacity to remove colour from musts and stained wines. Carbon L has been especially designed to ensure that the bouquet of the wines is not affected. Product subjected to authorization. You should comply with the legislation in force in your wine region.

Composition: is an activated, vegetable, black carbon in liquid form

Main application: used for removing colour from musts and stained or over-oxidised wines.

TREATMENTS TO CORRECT SPECIFIC DEFECTS **DECOLOURIZING CARBON**



CARBON PELLETS

Decolourizing carbon in pellet

Carbon Pellets 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 Carbon Pellets, and of a total absence of unwanted by-products, such as metals or odours foreign to the treated product.

Composition: activated vegetable carbon.

Application: Carbon Pellets is particularly effective at decolourizing wines.

CARBONE DECOLORANTE SUPERATTIVO CP

Dosage:

• 100 g/hL - 400 g/hL

1 kg

10 kg







stability in the wine. When added to white musts, Carbone Superattivo CP eliminates any excess anthocyanins, leading to improvements in the colour profile of the wine. When used during fermentation, it helps remove any pesticide residues, leading to a smoother fermentation process.

Activated vegetable carbon boasting highly porous particles which can adsorb various different types of molecules, depending on their size. During fermentation: to improve colour and

Composition: activated vegetable carbon.

Main application: decolourization.

Vegetable decolourizing carbon

Dosage:

• 10-100 g/hL.

20 kg

NO DUST CARBON

Dust-free decolourizing carbon

The production process used for No-Dust Carbon involves maintaining a suitable level of moisture so that the final product will be a lot less dusty. When added to white musts, it removes easily oxidized colourant substances (leucoanthocians and catechins) and iron, thereby enhancing the stability of the wine and its resistance to different forms of oxidation and enzyme-induced faults.





Composition: activated vegetable carbon.

Main application: decolourization.

Dosage:

• 10-100 g/hL.

TOPCARBON

Vegetable decolourizing carbon

The adsorption capacity of Top Carbon makes it highly effective on white wines marked by excessively intense colouring, which may be caused by oxidation or maderization phenomena. Top Carbon can also be used successfully to reduce the iron content in wines, helping protect them against iron casse.



1 kg

10 kg

10 kg

Composition: vegetable activated carbon.

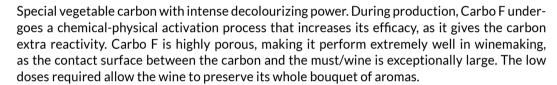
Main application: decolourization.

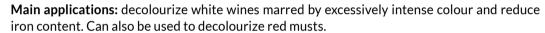
Dosage:

• 10-100 g/hL.

CARBO F

Vegetable decolourizing carbon





Composition: vegetable carbon.

Dosage:

• 10-100 g/hL

DECONTAMINATING CARBON

10 kg

EVF - FREE

Off-odour adsorbent

In certain years or under certain microbiological conditions, wines can present high levels of various types of off-odours - much higher than the maximum limits imposed in various countries. EVF-Free is a formula crafted specifically to adsorb (and therefore reduce the quantities of) the molecules responsible for off-odours, in particular those causing musty and/or phenolic odours.



Composition: active carbon and silica gel.

Main application: eliminate off-odours, in particular musty and/or phenolic odours.

Dosage:

• 30-100 g/hL

LUMYCLEAN REX





Treatment to combat 'light-struck' defects

Lumyclean Rex is a 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 'lightstruck 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.

Composition: activated vegetable charcoal, silica gel.

Main application: reduction in riboflavin content.

Dosage:

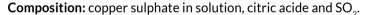
• 3-5 g/hl, depending on needs and working conditions

ANTI-REDUCTION TREATMENTS

ANTI RED SOL

Treatment for reduction faults

This product targets sensations of reduction in still wines, bases for sparkling wines and sparkling wines at the time of the tirage.



Main applications: prevention and treatment of sensations of reduction.

Dosage:

- Still wines: 2-4 cL/hL.
- Bases for sparkling wines: 1-2 cL/hL.
- Sparkling wines: 1-2 cL in the quantity of liqueur d'expedition necessary for 100 bottles.

ACIDIFIERS

CITRIC ACID Acidifier

Composition: citric acid monohydrate.

Dosage: by law, the amount in the finished wine must not exceed 1g/L.











Composition: L-lactic acid 88% in aqueous solution.

Lactic Acid is of natural origin, obtained by sugar lactic fermentation.

• In white and rosé wines: from 3 to 15 g/hl for freshness and fineness.

Main applications: it is used to acidify musts derived from extremely ripe and insufficiently

• In red wines: 10-20g/hl to boost freshness in the finish and reduce all forms of bitterness

Main application: useful to acidify juices extracted from very ripe, insufficiently acidic grapes.

Maximum legal dosage and acidification declaration according to current regulations.

DL-malic acid makes it possible to increase and manage the total acidity of wines.

Dosage: maximum dose allowed under the laws of the region in question.

25 kg

POTASSIUM BICARBONATE

De-acidifier

Main applications: deacidify must and wine.

Composition: potassium bicarbonate.

Dosage: under normal conditions, adding 1 g/L of potassium bicarbonate reduces acidity by 0,49 g/L, expressed as sulphuric acid.

25 kg

TETRACOMPLEX

Composite deacidifier

The components making up Tetracomplex show a tendency to react with the tartaric acid in the wine, neutralizing its acid groups and transforming it into its insoluble salts, potassium bitartrate and calcium tartrate. In this way, Tetracomplex allows the winemaker to reduce any excess acidity and attain a marked improvement in the sensory balance of the treated wine. Moreover, reducing acidity - especially in red wines - provides a significant boost to the start-up of malo-

Composition: potassium tartrate, potassium bicarbonate, calcium carbonate.

Dosage: according to needs, calculating that 100g/hL of product reduces the total acidity by

OTHER ACIDS

1 kg

lactic fermentation.

Main applications: wines with excessive total acidity and abnormally low pH.

approximately 1%.

TARTARIC ACID

LACTIC ACID

acidic grapes, or in wines.

MALIC ACID D,L

Composition: DL-malic acid.

Acidifier

Dosage:

Acidifier

Acidifier

Composition: L(+) tartaric acid.

Dosage: maximum dose allowed by the law in force.





1 kg - 5 kg

25 kg

5 kg 25 kg

5 kg

25 kg

DE-ACIDIFIERS

1 kg 25 kg

CALCIUM CARBONATE

De-acidifier

Calcium Carbonate is a deacidifier suitable for use in must and wine. It induces the precipitation of tartaric acid in the form of an insoluble salt.



Main applications: deacidify must and wine.

Composition: calcium carbonate.

Dosage: • 50 g/hL of calcium carbonate reduces acidity by 0.5 g/L, expressed as sulphuric acid.









Antioxidant preservative

ASCORBIC ACID

Composition: L-ascorbic acid.

Main applications: prevent wine oxidation.

Dosage: legal limit: 25 g/hL



1 kg











MICROBIOLOGICAL STABILIZATION

SULPHITES

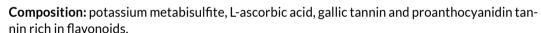
OXYLESS RANGE

1 kg

OXYLESS U

Special antioxidant for grapes

A combination of antioxidant products that prevents oxidation thanks to its components. In particular, L-ascorbic acid eliminates any oxygen present and, at the same time, limits the action of oxidase enzymes such as laccase and polyphenol oxidase. The simultaneous presence of gallic tannins and sulphur dioxide makes it possible to block the action of oxygenated water and any free radicals. The presence of proanthocyanidin tannins, rich in flavonoids, makes it possible to obtain fruitier and more complex wines.



Main application: prevents grape oxidation during harvesting, unloading and pressing.

Dosage:

- 10-25 g/hL for white grapes
- 20-30 g/hL for red grapes.

500 g 10 kg

OXYLESS M

Special must antioxidant

A combination of antioxidant products that, thanks to its components, makes it possible to obtain fresh fruity wines with greater longevity. The presence of yeast cell walls with quick release of glutathione increases the shelf life of the wine. The absence of SO₂ and the simultaneous presence of gallic tannins and proanthocyanidins in the formula of OxyLess M enable the glutathione to be maintained in non-oxidized form. The use of OxyLess M at the end of alcoholic fermentation enables glutathione to be preserved in the must. The simultaneous presence of tannin contributes to an improvement in the structure and taste balance of the final wine.

Composition: yeast cell walls rich in glutathione (GSH) and sulphurated amino acids, gallic tannin and proanthocyanidin tannin rich in flavonoids.

Main application: protects varietal and fermentative aromas and flavours in white and rosé wines.

Dosage:

- 20-30 g/hL in white grape must
- 10-20 g/hL in red grape must.

MICROBIOLOGICAL STABILIZATION SUI PHITES

OXYLESS V

Special antioxidant for wine

A combination of antioxidant products that prevents oxidation during racking operations. The presence of L-ascorbic acid eliminates any oxygen present and makes it possible to reduce the amount of SO₂ needed to protect against oxidation. The simultaneous presence of sulphur dioxide makes it possible to block the action of oxygenated water and any free radicals. The green tea proanthocyanidin tannin, rich in flavonoids, makes it possible to improve the structure and body of the wine, stabilize the colouring matter and speed up the consumption of dissolved oxygen during racking.

Composition: potassium metabisulfite, L-ascorbic acid, green tea proanthocyanidin tannin rich in flavonoids.

Main application: protects varietal and fermentative aromas and flavours in white and rosé

Dosage:

• 10-20 g/hL.

Before each racking, add OxyLess V to stop too much oxygen getting into the wine.

OTHER SULPHITES

FERROBLOCK

Redox-reaction stabilizer

By lowering the redox potential of the wine, Ferroblock prevents the onset of oxidation reactions that can make the wine lose freshness and liveliness. Excellent results have been achieved in preventing and treating colour loss caused by oxidase casse. When Ferroblock is added to the wine before its last filtration before bottling, it ensures long-lasting stability and plays a decisive role in creating fresh, delicate, intensely fruity wines.

Composition: anhydrous citric acid, potassium metabisulfite, L-ascorbic acid.

Main application: prevents wine oxidation.

Dosage:

- 10-25 g/hL for white wines.
- 10-20 g/hL for red and rosé wines.

Adding 10g/hL increases the total SO₂ level by approximately 20mg/L.









POTASSIUM METABISULPHITE

Preservative - Antioxidant

Main application: provide microbiological and antioxidant protection.

Composition: potassium metabisulfite.





Dosage:

• 1 g of potassium metabisulfite releases 0.5g of SO₂. Maximum dosage usually apply, please refer to the applicable legislation.

STERISOLFITO 15

Sulphite in liquid form

As it's a sulphite, Sterisolfito 15 performs a preventive task against the dangerous oxidation reactions that can take place in must and wine. It allows the winemaker to combat both oxidation problems and the growth of indigenous microflora.

Composition: ammonium bisulfite, enough deionized water for a final volume of 100 ml (every 100g of product releases around 15g of SO_a).

Main application: prevents oxidation.

Dosage:

- 30-40 g/hL in must extracted from healthy grapes.
- 60-80 g/hL in must extracted from compromised grapes.

STERISOLFITO 45

Sulphite

Sterisolfito 45 inhibits the multiplication of indigenous blastomycetic and bacterial flora, thereby ensuring that only the selected starters initiate fermentation and bring it to completion. Sulphuring with ammonium bisulfite has an advantage over using potassium metabisulfite in that it shifts the pH towards slightly lower values. This property can be highly valuable in winemaking situations where the acidity of the wine needs to be preserved as far as possible.

Composition: ammonium bisulfite, enough deionized water for a final volume of 100 ml (every 100g of product releases around 45g of SO₂).

Main application: prevents oxidation.

Dosage:

- 10-15 g/hL in must extracted from healthy grapes.
- 20-25 g/hL in must extracted from compromised grapes.

1 kg - 5 kg 25 kg





1000 kg











OTHER SULPHITES

Penny Damigiane 480 tablets **Penny Fusti 120 tablets** Penny Vasche 50 tablets

PENNY

Floating anti-Flowers-of-Wine tablets



The air enclosed between the surface of the liquid and the lids of wine vessels is the perfect breeding ground for the mycetic microflora that leads to Flowers of Wine. This growth inevitably spoils the wine, and if left unchecked can lead to sourness and even acescence. Allyl isothiocyanate displays an excellent capacity to inhibit the development of oxidizing yeasts. Penny tablets are available in three different formats:

- Penny Damigiane: for relatively small vessels, but with a capacity of over 20 litres;
- Penny Fusti: for medium-sized vessels:
- Penny Vasche: for large vessels.

Composition: solid paraffin and allyl isothiocyanate.

Main application: prevent the onset of Flowers of Wine and the development of oxidizing yeasts.

Dosage:

- Penny Damigiane: 1 tablet, to be replaced every 2-3 weeks.
- Penny Fusti: 1-2 tablets, to be replaced every 15-20 days.
- Penny Vasche: 1-2 tablets, to be replaced every 15-20 days.

1 kg 25 kg

SORBENOL

Fungistatic stabilizer



The anti-fermentation action of Sorbenol is particularly marked when it comes to Saccharomyces cerevisiae, which is why it's advisable to use it in cases where the winemaker wants to reduce the risk of refermentation to a minimum – for example, in wines with sugar residues or in partially fermented musts. Sorbenol is also effective at inhibiting the development of the microorganisms responsible for Flowers of Wine.

Composition: potassium sorbate.

Main Application: avoid refermentation and the onset of Flowers of Wine.

Dosage: 27g/hl of Sorbenol equals 200mg/l of sorbic acid in the wine.





TANNINS

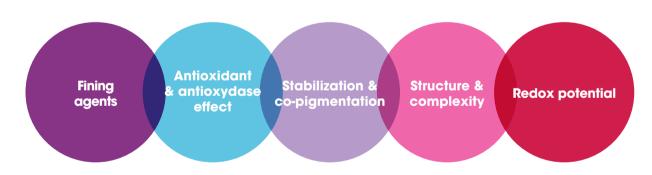
Exogenous winemaking tannins are polyphenols. Extracted from naturally occurring vegetable sources, they come from various botanical species such as gall, wood (chestnut, oak, mimosa, exotic woods and quebracho) and grapes (grape-pip and skin tannins).

Ellagic tannins ("Ellagitannins") and gallic tannins ("Gallotannins") belong to the category of hydrolyzable tannins: when exposed to an acid or to heat, they lead to the formation of ellagic or gallic acid.

Proanthocyanidin tannins belong to the category of condensed tannins.

Depending on their source – which determines their properties as winemaking aids –, they can have various uses:

- as fining agents, because the tannins interact with the proteins in the wine and the resulting compound precipitates;
- as antioxidant and antioxydase agents (as they consume O_a);
- as colour stabilizers (they limit the oxidative degradation of anthocyanins and facilitate co-pigmentation)
- to help improve the structure of the wine:
- to eliminate the reduction smell.



AGING PRE-BOTTLING

Approximate dose: from 10 to 40 g/hL

CHARACTERISTICS OF THE WINE

Approximate dose: from 1 to 5 g/hL **TANNINS**

LIMITING ANTIOXIDANT AND ANTIOXYDASE EFFECTS

0,5 kg 5 kg

GALLOTAN

Gallic tannin for fining and balanced mouthfeel



Thanks to its strong reactivity to proteins, Gallotan is able to avoid the problem of overfining when the wine is clarified using protein-based adjuvants (e.g. gelatin). Gallotan does not alter the wine's colour and is recommended for use above all on white wines which, as they naturally contain less tannins, are more susceptible to protein instability.





Composition: gall-nut tannin.

Main application: inhibit the enzymatic activity responsible for oxidation in must.

Dosage:

• 3-15 g/hL.

Perform laboratory tests in order to establish the optimal dosage.

0,5 kg

TAN FLAVOUR FF

Tannin to enhance sensory profiles



Thanks to its intense antioxidant effect, Tan FlavourFF protects both the colouring substances and the aromatic components from oxidation so that the wine does not suffer from browning. Moreover, using Tan Flavour FF in the early stages of winemaking allows the addition of specific aroma precursors that intensify the aromas of flowers and fruits in the wine.

Composition: granular proanthocyanidin tannin derived from lemon and acacia wood.

Main application: protects colouring substances and aroma producers at the same time as providing fruity and floral aroma precursors.

Dosage:

- white wines: 4-10 g/hL, divided into two doses, the first on the must and the second 24 hrs after initiating fermentation.
- red wines: 10–15 g/hL in a single dose 72 hrs after initiating alcoholic fermentation.





TANNINS

LIMITING THE OXIDATIVE DEGRADATION OF ANTHOCYANINS; PROTECTING AND STABILIZING COLOUR OVER TIME

1 kg 5 kg

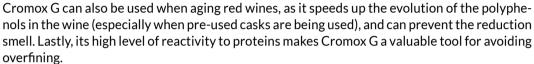
1 kg

5 kg

CROMOX G

Tannin providing antioxidant and colour-stabilizing power

Cromox G protects the colouring matternt substances that has just been extracted from the grapes. In synergy with SO₂, Cromox G acts to protect colouring substances from the outset, an action which can continue during maceration through Cromofix.



Composition: blend of hydrolyzable and condensed tannins.

Main application: colour stabilization in red wines during pressing and in the earliest stages of maceration.

Dosage:

10-30 g/hL.

CROMOFIX SR

Tannin for colour stabilization

When used during the pellicular maceration of red wine grapes, Cromofix SR protects the colouring substances from oxidation, as it acts as an oxygen acceptor. Moreover, as it reacts immediately with the extracted anthocyanins, it forms red compounds which remain stable over time. Works especially well when a sufficient quantity of tannins can't be extracted because of short maceration times or naturally low tannin contents. Excellent results have been obtained on Botrytis-infected grapes, as it has the capacity to inactivate laccase.

Composition: condensed tannin.

Main applications: colour stabilization in red wines during maceration and winemaking.

- 10-30 g/hL for colour stabilization.
- 15-50 g/hL to inhibit laccase.

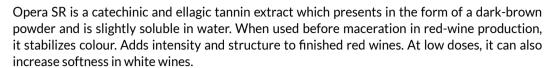
LIMITING, PROTECTING AND STABILIZING

1 kg - 5 kg 15 kg

TANNINS

OPERA SR

Tannin for colour stabilization







Composition: Quebracho-wood tannin.

Main application: stabilize colour during maceration when crafting red wines.

Dosage:

• during maceration: 15-30g per 100kg. • during winemaking: 15-30g per hL.

> 1 kg 10 kg

ECOBIOL COLOR PROTECT

Blend of tannins and yeast polysaccharides



Ecobiol Color Protect is a preparation made from proanthocyanidin and ellagic tannins with a high polysaccharide content (from yeast), designed for red wines. It's a 100% natural product that can be used at the fermentation stage to increase phenol compound stability and reduce tannicity while boosting the body and structure of the wines. The proanthocyanidin tannins found in Ecobiol Color Protect are similar to the condensed tannins found in grapes; they aid colour stabilization and help avoid colour loss. Ellagic tannins, on the other hand, help protect the anthocyanins, meaning that they are freed from the oxidation and precipitation problems that can arise at the aging stage.

Composition: proanthocyanidin and ellagic tannins and yeast polysaccharides.

Main application: stabilize colour when crafting red wines without causing precipitation.

- for colour stabilization: 20-40 g/hL.
- for laccase inhibition: 40-80 g/hL.
- for a considerable flavour boost: 30-60 g/hL.

1 L 5 L

OPERA GRAPE L

Grape tannin for fining, colour stabilization and structure



Opera Grape L is a stable, 100% soluble, tannin in liquid form which does not lead to losses through precipitation. When used on red wines, it stabilizes their colour and improves their phenolic potential in terms of both quantity and quality. In rosé wines, Opera Grape L removes excess proteins (boosting the action of bentonite clays), maintains colour and improves resistance to oxidation. Opera Grape L is a 100% natural product obtained exclusively from white wine grapes, with no colourants, no organic solvents and no export restrictions. It displays identical properties to the tannins naturally found in must and wine.

Composition: grape tannin in liquid form.

Main applications: improve clarification, colour stabilization and phenolic potential (structuring effect).

- red winemaking: 15-40mL/hL.
- rosé winemaking: 10-20mL/ hL.





TANNINS

SPECIAL TANNIN-BASED PRODUCTS FOR VINIFICATION

FERM RANGE



VHANCE THE SPIC

FERMANN SPICY

Optimising alcoholic fermentation of red and rosé musts



Fermann Spicy protects colour and facilitates anthocyanin-tannin condensation while red-wine grapes are macerating. There are many benefits that can be gained by using this product: protection against oxidation and the effects of oxidase enzymes, stabilization of colouring substances, enhancement of dark berry (especially blackcurrant) and spicy notes, and

greater persistence of fresh and fruity notes over time.

Composition: yeast hulls with a high content of soluble mannoproteins, ellagic and grape seed tannins

Main application: used to produce red and rosé wines with strong spicy and dark-berry notes.

Dosage:

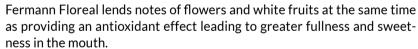
• red and rosé musts: 10-40 g/hL.

Maximum dose allowed by the EU: 80 g/hL.



FERMANN FLOREAL

Optimising alcoholic fermentation of white and rosé musts



There are many benefits that can be gained by using this product: enhancement of white fruit (e.g. apple, pear) and floral notes, as well as

increasing softness and volume, balance and structure in the mouth.

Composition: deactivated yeast rich in glutathione with a high content of soluble mannoproteins, gallic and acacia tannins.

Main application: production of white and rosé wines enhanced whith fruit and floral notes.

Dosage:

• red and rosé musts: 10-40 g/hL.

Maximum dose allowed by the EU: 50 g/hL.





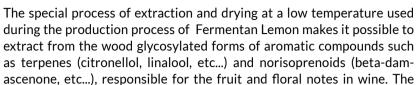


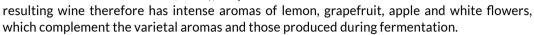
TANNINS SPECIAL TANNIN-BASED PRODUCTS FOR VINIFICAT



FERMENTAN LEMON







Composition: blend of condensed and gallotannins.

Main application: produce white and rosé wines with a real citrussy feel.

Dosage:

- rosé must: 5-15 g/hL.
- white must: 2-15 g/hL.

BERRY

EXPRESSES

NOTES OF **RED FRUIT** 1 kg









as terpenes (citronellol, linalool, etc...) and norisoprenoids (beta-damascenone, etc...), responsible for the hints of red berry fruit in wine. The resulting wine therefore has intense aromas of cherry, strawberry, marasca cherry, blueberry, etc. which complement the varietal aromas and those produced during fermentation. Fermentan Berry also promotes colour stabilization and prevents oxidation of the primary

extract from the wood glycosylated forms of aromatic compounds such

Composition: blend of condensed tannins extracted from wood of red berry fruit species.

Main applications: production of red and rosé wines for a red berry fruity taste, with a strong action in stabilising the colour.

Dosage:

notes.

- rosé must: 2-15 g/hL.
- red must: 5-20 g/hL.



TANNINS SPECIAL TANNIN-BASED PRODUCTS FOR VINIFICATION

1 kg



FERMENTAN WHITE

A blend of gallic tannins and deactivated yeasts to increase the aroma of white of rosé wines



Fermentan White is a blend of two powerful groups of antioxidant compounds, gallic tannins and deactivated yeast rich in antioxidant peptides (glutathione). Its use in the fermentation stage of white and rosé wines increases the protection of the varietal aromas and those produced dur-

ing fermentation. The level of amino acids and sulphur peptides represents a source of aromatic precursors that the yeast can use for the production of tropical aromas. Fermentan White helps to produce wines with stable, fresh and intense aromas.

Composition: blend of gallic tannins and inactive yeast rich in peptides.

Main application: production of white and rosé wines rich in tropical notes.

Dosage:

- rosé must: 5-20 g/hL.
- white must: 2-20 g/hL.

SPECIAL TANNIN-BASED PRODUCTS FOR VINIFICATION

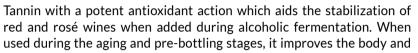
OPERA RANGE

The OPERA range of tannins is the result of a broad programme involving the selection of the best woods and essences and the study of the effects of the different extraction techniques under different working conditions. OPERA tannins also undergo stringent tests in order to ensure constant quality in all the batches produced. Within the OPERA range you can find the right tannin for every winemaking need and for every technical requirement. Furthermore, they come with advice on the right dosage for each different style of wine and for the various markets around the world. We always recommend performing a taste test before treatment.

OPERA SEED



Tannin extracted from grape pips



the aromatic complexity of the wine. Opera Seed is perfect for red wines where greater structure is needed. Opera Seed can also be used before the final racking on wines aged in wooden barrels to protect them from oxidation.

Composition: condensed tannins derived from grape pips.

Main applications: during the fermentation and racking of red and rosé must, for colour stabilization. During the aging and pre-bottling stages, to improve the body and the aromatic complexity of the wine.

Sensory characteristics: complexity on the nose, enhancement of varietal notes.

Dosage:

• red must and wine: 5-20 g/hL.

• white and rosé must and wine: 1-10 g/hL.

(see table at the end of this section)



OPERA GRAPE

Tannin extracted from grape skins

When used during the alcoholic fermentation, this tannin enhances the antioxidant power of the must and preserves its feeling of freshness. When used during the aging and the pre-bottling stages, it refreshes aro-

mas by enhancing their fruitiness, while increasing the structure and rebalancing the mouthfeel of the wine. Opera Grape is perfect for stepping up the quality of wines at the same time as increasing their aromatic intensity and softness.

Composition: tannin extracted from the skins of white-wine grapes.

Main applications: during the fermentation and racking of white, rosé and red must to increase antioxidant protection and create long-lasting freshness.

Sensory characteristics: freshness on the nose, rebalance of the mouthfeel.

Dosage:

• red must and wine: 5-20 g/hL. • white and rosé must: 1-10 g/hL. (see table at the end of this section)











OPERA MEDIUM T

Oak tannin



Using Opera Medium T at the pre-bottling stage increases sweetness, intensity of aromas and fullness in the wine, making it more balanced when it's been aged in wooden barrels and also drawing out the aging



notes. Opera Medium T can be used to supplement the loss of tannins from pre-used barrels, meaning that it can be used for longer without losing its ability to induce the development of the wine. Opera Medium T combats reduction in wines aged in steel tanks or used casks.

Composition: ellagic tannin derived from oak wood.

Main applications: used during the pre-bottling stage for red wines, helps boost the structure and intensity of aromas as well as providing an antioxidant effect.

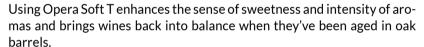
Sensory characteristics: vanilla and coconut.

• pre-bottling of white, rosé and red wines: 1-20 g/hL. (see table at the end of this section)



OPERA SOFT T







0,5 kg

Composition: Oak tannin.

Main applications: a useful tool for improving white, rosé and red wines during the pre-bottling stage, with an excellent antioxidant effect.

Sensory characteristics: coconut, sweetness.

Dosage:

- pre-bottling of white and rosé wines: 1-5 g/hL.
- pre-bottling of white and rosé wines: 3-20 g/hL.

(see table at the end of this section)

TANNINS SPECIAL TANNIN-BASED PRODUCTS FOR VINIFICAT

0,5 kg



OPERA NO-GREEN





Using Opera No-Green during the aging stage helps cover up vegetal and astringent notes, and allows the varietal properties which tend to hide behind 'green' notes to come to the fore.



Composition: condensed tannins extracted from the wood of exotic species.

Main application: covers up vegetal notes when aging white, rosé and red wines, with an excellent antioxidant effect.

Sensory characteristics: helps cover up vegetal and astringent notes.

Dosage:

• for aging rosé and red wines: 5-20 g/hL. (see table at the end of this section)

0,5 kg



OPERA NO-REDUCTION

Oak tannin



When used during the aging stage, Opera No-Reduction helps mask any sense of reduction and allows varietal sensations to emerge. Opera No-Reduction has been seen to display a good ability to complex the sul-



phurous proteins responsible for off-odours in wines. Opera No-Reduction contains a high level of ellagitannins and simple phenols, which are very active as oxygen receptors. This makes it a valuable weapon in the fight against oxidation.

Composition: hydrolyzable tannin.

Main applications: used when aging white, red and rosé wines, it helps cover any notes of reduction and increases the wine's structure.

Sensory characteristics: solve the problems linked to the perception of reduction and draw out varietal notes.

Dosage:

• for aging white, rosé and red wines: 0,5-20 g/hL. (see table at the end of this section)





SPECIAL TANNIN-BASED PRODUCTS FOR VINIFICATION

0,25 kg



OPERA HIGH T

Blend of condensed and hydrolyzable tannins



Using Opera High T during the pre-bottling stage increases the structure, intensity of aromas, length and balance of the wine when it's been aged in oak barrels. Also enhances aging notes and tertiary aromas.



Composition: condensed and oak tannins.

Main applications: used during the pre-bottling stage for red wines, helps boost the structure and intensity of aromas as well as providing an antioxidant effect.

Sensory characteristics: liquorice, tobacco.

Dosage:

• pre-bottling of red wines: 3–20 g/hL. (see table at the end of this section)

0,5 kg



OPERA FRUITY

Blend of condensed tannins



Using Opera Fruity when aging wines enhances the fruity notes in the wine, as well as the perception of sweetness and the intensity of varietal aromas.



Composition: condensed tannins extracted from the wood of red-berry trees.

Main application: when aging red and rosé wines, this product is helpful to boost the sensory profile as well as providing an antioxidant effect.

Sensory characteristics: sweetness, fruity notes, intensity of varietal aromas.

Dosage:

• for aging red wines: 10-20 g/hL. (see table at the end of this section)

OPERA REFRESH

Blend of condensed and gallic tannins



Used at the aging and pre-bottling stages, Opera Refresh helps refresh tired, oxidized wines and open up their varietal notes. Using Opera Refresh balances the structure of wines by heightening the sensations of ibute significantly to the improvement of taste and retropasal persention.

structure that contribute significantly to the improvement of taste and retronasal perception. Wines treated with Opera Refresh display more complexity and persistence of aromas and flavours. It boosts the effects of SO_2 thanks to the blend of different types of tannins. Great at preserving the intensity of aromas and flavours in white wines.

Composition: blend of condensed and gallic tannins.

Main applications: when used during the aging and pre-bottling of white, rosé and red wines, it is useful to cover up notes of oxidation at the same time as increasing freshness and opening up aromas and flavours.

Sensory characteristics: freshness, complexity, persistence.

Dosage:

• at the aging and pre-bottling stages for white, rosé and red wines: 0.5–10 g/hL. (see table at the end of this section)

SPECIAL TANNIN-BASED PRODUCTS FOR VINIFICATION



OPERA MATURATION

Blend of condensed and hydrolyzable tannins



TANNINS

Opera Maturation increases structure and aromatic complexity, as well as encouraging balanced aging in wooden barrels. Helps red wines evolve satisfactorily. Perfect for increasing the persistence of aromas and fla-



vours, as well as prolonging the aftertaste of quality wines, where it adds a hint of sweetness. Using Opera Maturation allows the wine to reach a tannin content which encourages it to develop towards greater elegance and a more full-bodied feel in the mouth.

Composition: condensed and oak tannins.

Main applications: when aging white, rosé and red wines, this product is helpful to boost the complexity, structure and antioxidant effect.

Sensory characteristics: fruity notes, sweetness, persistence.

Dosage:

• aging of white and rosé wines: 1-5 g/hL.

• aging of white and rosé wines: 10-20 g/hL.

(see table at the end of this section)

0,5 kg







SPECIAL TANNIN-BASED PRODUCTS FOR VINIFICATION

SOLO RANGE

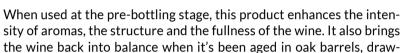


Every tannin is unique in terms of both its chemical-physical properties and its interaction with the wine. The SOLO range of tannins produced by Perdomini is the result of selection of the finest base materials, careful combination of these materials and an exclusive extraction process distinguished by low-pressure and low-temperature working conditions. These conditions make it possible to extract solely and exclusively the tannins that will give the wine added structure and softness, as well as enhancing the overall complexity of the wine by drawing out the unique characteristics of each variety of grape.



SOLO DARK

Blend of oak tannins





0,25 kg

0,25 kg

ing out its varietal notes and increasing its complexity. Solo Dark can also be used when aging wines to help prolong the lifespan of the wooden vessels.

Composition: blend of oak-wood tannins (from different species).

Main application: enhance the structure, fullness and intensity of aromas during the pre-bottling of red, white and rosé wines.

Sensory characteristics: coconut, chocolate, coffee.

Dosage

• pre-bottling of white, red and rosé wines: 1–20 g/hL. (see table at the end of this section)



SOLO RUBY

Blend of oak tannins

When used during the pre-bottling stage, Solo Ruby enhances the fruity notes arising from varietal characteristics, sensations of sweetness and fullness. It also helps balance wines when they've been aged

in oak barrels. For wines with an elegant, refined and austere sensory profile, using Solo Ruby provides the missing elements to achieve real quality.

Composition: blend of oak-wood tannins (from different species).

Main applications: enhance the fullness and intensity of aromas during the pre-bottling of red and rosé wines, as well as providing an antioxidant effect.

Sensory characteristics: red berry fruit, jam.

Dosage:

• pre-bottling of red and rosé wines: 1-20 g/hL. (see table at the end of this section)

Average doses in g/hL

Perform laboratory tests to establish the technical effects the tannin has on the sensory profile and determine the ideal dosage.

SPECIAL TANNIN-BASED PRODUCTS FOR VINIFICATION

| | М | ust T | AGI | ING | PRE-E | BOTTLING | CHARACTERISTICS |
|--------------------|--------|--------|---------|---------|----------|----------|--|
| Opera Seed | 1 - 10 | 5 - 20 | 1 - 10 | 5 - 20 | 1 - 10 | 5 - 20 | Colour, aromatic complexity, structure, enhancement of varietal notes. |
| Opera Grape | 1 - 10 | 5 - 20 | 1 - 10 | 5 - 20 | 1 - 10 | 5 - 20 | Freshness on the nose, rebalance of the mouthfeel. |
| Opera Medium T | | | | | 1 - 5 | 5 - 20 | Coconut, vanilla, structure, intensity of aromas. |
| Opera Soft T | | | 1 - 5 | 10 - 20 | 1 - 5 | 3 - 20 | Coconut, sweetness, intensity of aromas. |
| Opera No-Green | | | 5 - 10 | 10 - 20 | | | Helps cover up vegetal and astringent notes. |
| Opera No-Reduction | | 5 - 10 | 0.5 - 2 | 5 - 20 | | | Solves the problems linked to the perception of reduction. |
| Opera High T | | | 1 - 5 | 5 - 20 | 1 - 5 | 3 - 20 | Liquorice, tobacco, structure, intensity of aromas and length. |
| Opera Fruity | | | 1 - 5 | 10 - 20 | | | Sweetness, fruity notes, intensity of varietal aromas. |
| Opera Maturation | | | 1 - 5 | 10 - 20 | | | Fruity notes, sweetness and persistence. |
| Opera Refresh | | | | | 0.5 - 10 | 1 - 10 | Freshness, complexity, persistence. |
| Solo Dark | | | | | 1-2 | 1 - 20 | Coconut, chocolate, coffee, structure, fullness, intensity of aromas. |
| Solo Ruby | | | | | 1 - 2 | 1 - 20 | Red fruit, jam, fullness, intensity of aromas. |

^{*} if made from Botrytis-infected grapes: 5–10 g/hL, on finished wine: 1–4 /hL



TANNINS



WOODEN BARREL SUBSTITUTES

The fact that wood lends wines certain aromas and flavours plays an important role in guiding wines towards specific sensory objectives. The kind of evolution a wine treated with wood can have depends not only on the intrinsic characteristics of the wood, but also on the coupling of wood and toasting level – also a crucial factor.

In compliance with OIV resolution OENO 430/2010, our woods do not undergo any form of combustion – not even on the surface – and they aren't charred or crumbly to the touch. Moreover, they have not undergone any form of chemical, enzymatic or physical treatment except heating through convection.

| | | Sensory impact | Intenso Chips Range | ্ট্র Dosage g/hL | Different types of chips | Average time of contact |
|--------|-------------|--|-------------------------------|------------------------|--------------------------------|-------------------------|
| | | first-use barrel effect | INTENSO CAPPUCCINO | 300-600 | 2 | 25-60 days |
| | | used barrel effect | INTENSO VANILLA SOFT | 300-500 | 2 | 25-60 days |
| | | enhancement of red-berry notes | INTENSO RED FRUIT | 300-500 | 2 | 25-60 days |
| \Box | 33) | sensory complexity and spicy notes | INTENSO SPICY | 150-300 | 3 | 25-60 days |
| | D | sensations of chocolate and cappuccino | INTENSO CHOCOLATE | 150-300 | 1 | 25-60 days |
| | | used barrel effect | INTENSO CREAMY | 100-200 | 2 | 25-60 days |
| | Ò | sweet and fruity notes | INTENSO WHITE & YELLOW FRUITS | 50-150 | 1 | 25-60 days |
| | | floral aromatic notes | INTENSO WHITE FLOWERS | 100-200 | 2 | 25-60 days |

WOODEN BARREL SUBSTITUTES

INTENSO CHIPS RANGE

As the conclusion to a research programme carried out over several years, Perdomini has selected a special range of high-quality wood derivatives from a variety of different sources and with different levels of toasting, the aim being to give each product in this family a specific, unique sensory objective.

The study was conducted by testing different combinations of these base ingredients on many different varieties of wine until a complete range for both white and red wines was created. FeelWood gets its name because the "feel" produced by each product in the range is the winemaker's main aim in using wood derivatives to craft their wine.

The wood chips are packaged in specially designed infusion bags. The bags have a divider keeping the various types of wood separate to ensure the homogeneity of the formulations. This homogeneity wouldn't be guaranteed by mixing up different sizes of chips.

Chip sizes: 0.5-2cm.



INTENSO CAPPUCCINO



Composition: blend of selected French and American species of oak (*Quercus*

Main applications: closely imitate the sensory effects obtained by using a new oak barrel. To be used on red wines.

Dosage:

• 300-600 g/hL for 25-60 days.



INTENSO VANILLA SOFT

Chips in Infusion Bag

Chips in injusion bug

Composition: blend of selected American species of oak (Quercus sp.).

Main application: replicate the sensory effect of used oak barrels for aging

red wines.

Dosage:

300-500 g/hL for 25-60 days.

10 kg

10 kg



10 kg

10 kg

10 kg

10 kg

Composition: blend of selected French species of oak (Quercus sp.).

Main applications: enhance and amplify notes of red berries in the bouquet

of red wines.

Dosage:

• 300-500 g/hL for 25-60 days.

INTENSO SPICY

Chips in Infusion Bag

Composition: blend of selected French species of oak (Quercus sp.).

Main applications: enhance and amplify aromatic complexity in general, as well as spicy notes. To be used on red wines.

Dosage:

• 150-300 g/hL for 25-60 days.



INTENSO CHOCOLATE

Chips in Infusion Bag

Composition: blend of selected French species of oak (Quercus sp.).

Main applications: provide an intense chocolately feel, with added notes of coffee, hints of spice and a touch of coconut. To be used on red wines.

Dosage:

• 150-300 g/hL for 25-60 days.



INTENSO CREAMY

Chips in Infusion Bag

Composition: blend of selected American species of oak (Quercus sp.).

Main applications: enhance and amplify the best aromatic notes connected with aging white wines in used barrels.

Dosage:

• 100-200 g/hL for 25-60 days.

WOODEN BARREL SUBSTITUTES INTENSO RANGE



INTENSO WHITE & YELLOW FRUITS

Chips in Infusion Bag

Composition: blend of selected American species of oak (Quercus sp.).

Main applications: enhance and amplify the fruity notes in white wines.

Dosage:

• 50-150 g/hL for 25-60 days.



INTENSO WHITE FLOWERS

Chips in Infusion Bag

Composition: blend of selected American species of oak (Quercus sp.).

Main applications: enhance and amplify the floral notes in white wines.

Dosage:

• 100-200 g/hL for 25-60 days.





10 kg







Filter surfaces aren't always able to capture all the suspended particles in a wine, especially if the liquid being filtered is rather diluted. Filter aids are very useful, as they increase the level of filtration and reduce clogging.

The Perdomini range comprises three types of filter aid:

- Perlites
- Fossil shell flours
- Precoat filtration

PERLITES

25 kg - 22 kg 20 kg

DIAPERL

Filter aid

The perlite products in the Diaperl range display three different levels of permeability, as can be seen from the table below. The main features of these perlites are that they are ultra-pure and free from organic residue - this means they create no unwanted odours in the filtered product.



Composition: perlite.

Main application: form filtration cakes in DE and vacuum filtration.

Dosage: pour Diaperl into the product being filtered at a dosage ranging from 50-120g/hl, depending on specific needs. Excellent results have been attained by using Diaperl in tandem with Drenopor and Drenopor CF precoats.

| ANALYTICAL DATA | DIAPERL M | DIAPERL V | DIAPERL VV |
|--|-----------|-----------|------------|
| Permeability in Darcy | 0,9 | 1,5 | 2,03 |
| Wet specific weight (g/l) | 180 | 150 | 150 |
| Colour | white | white | white |
| Moisture | 1% | 1% | 1% |
| Silica (SiO ₂) | 72,0% | 72,0% | 72,0% |
| Alumina (Al ₂ 0 ₃) | 14,0% | 14,0% | 14,0% |
| Iron oxide (Fe ₂ 0 ₃) | 0,7% | 0,7% | 0,7% |
| Na ₂ O | 4,0% | 4,0% | 4,0% |
| K ₂ 0 | 8,8% | 8,8% | 8,8% |
| Calcium oxide (CaO) | 0,3% | 0,3% | 0,3% |
| Magnesium oxide (Mg0) | 0,1% | 0,1% | 0,1% |

FOSSIL SHELL FLOURS

DIACEL

Diatom filter aid

Inert, insoluble and presenting a volume of distribution only 15% of which is constituted by solids, these filter aids are perfect for forming filter cakes for use in DE filtration.





Composition: top-quality American diatoms.

Main applications: primary filtration and polishing.

Dosage: to form the precoat, pour Diacel into water or another clear liquid at a dosage of 500-1000g/m² of filter surface. Excellent results can be attained by combining Diacel products with Drenopor and Drenopor CF precoats. When ready for filtration, pour 50-120g/hl (depending on specific needs) of Diacel into the product being filtered.

PRECOAT FILTRATION

10 kg

DIAPOL SUPER MV

Stabilizing filter aid



The Diapol Super MV formulation optimizes the respective proportions of PVPP, silica gel and inert substances. This product assists the filtration process and at the same time provides a powerful stabilizing effect on any unstable polyphenols and proteins in the wine. Removing proteins with silica gel leads to wines with a low filterability index, therefore with less risk of clogging up the microfiltration membrane.

Composition: PVPP, silica gel, fossil shell flours.

Main applications: lower the catechin and leucoanthocyanin content, stabilize wines affected by oxidation or protein clouding, stabilize colouring substances.

Dosage:

• 20–50 g/hL depending on the type of wine and the operating conditions.



FILTRATION ADDITIVES

10 kg

10 kg

Drenopor Filter M is more suitable in order to prevent clogging phenomena.

Composizione: α -cellulose fibres.

Main application: ideal for deep and DE filtration.

Dosage:

• 500-1000 g/m² of surface area.

HYDROPOR BLEND

Prehydrated filter aid

The α -cellulose fibres have been processed using a mechanical procedure that opens them up to the right point; this way, they ensure that the precoats adhere perfectly to the surfaces of the filter sheets without creating preferential flow paths. The diatoms used together with these fibres help disperse the fibres quickly and create the right degree of drainage to avoid sudden clogging problems.

Composition: α-cellulose fibres, diatoms.

Main applications: DE filtration of must and wine. Suitable principally for polishing processes.

Dosage:

• 500-1000 g/m² of surface area.

PRECOAT

Prehydrated filtration adjuvant

The products in the Precoat range contain alpha-cellulose fibres processed using a special procedure that guarantees both optimal filtration and ease of use.

- Precoat SV Wet density: 0,268 g/mL Permeability: 300-500 hL/h/m²
- Precoat M Wet density: 0,266 g/mL Permeability: 250-500 hL/h/ m²
- Precoat S Wet density: 0,298 g/mL Permeability: 200-350 hL/h/ m²

Composition: precoat with medium α -cellulose-fibre content and silicates.

Main application: DE filtration, from primary filtration to polishing.

- Precoat SV: for high-yield DE filtration and rotary vacuum filters. Used to filter must, juice and liquids with dregs.
- Precoat M: particularly recommended for high-yield DE filtration;
- Precoat S: recommended for polishing filtration.

Dosage:

- Precoat SV: 10% of the weight of filtration flour to be used.
- Precoat M and S: 400-700 g/m² of filter surface. 20-100 g/hL for DE filtration.

Stabilizing filter aid

DIAPOL VB

Diapol VB is intended for exclusive use with white must and wine, to remove excess colour and unstable polyphenolic fractions, which are responsible for browning.

Diapol VB can be used directly in DE filtration, but acts more forcibly when added to the bulk for tank filtration. The removal of protein fractions by silicagel makes it possible to obtain wines with a low filterability index and therefore with less danger of clogging the microfiltration membrane.

Composition: PVPP, activated carbon, silica gel, fossil shell flours.

Main applications: helps carry out both the DE filtration process and an effective stabilizing action on the product.

Dosage:

• 60-120 g/hL depending on the type of wine and the operating conditions.

DRENOPOR CF 300

Precoats with strong adsorption capacity

Top-quality perlites combined with α -cellulose fibres for highly effective precoats. Cellulose performs a mechanical action forming a compact, easily removed precoat, while perlites form a complex network of tiny ducts that guarantee retention of the solid particles and other impurities. The precoat is also distinguished by its exceptional strength, which makes it resistant to breaking and cracking.



Composition: α-cellulose fibres, fossil shell flours.

Main application: Drenopor CF 300 is particularly recommended for high-yield filtration.

Dosage:

- 500-800 g/m² of filter surface.
- 20-50 g/hL for DE filtration.

DRENOPOR FILTER "M" E "S"

Precoats with strong adsorption capacity

The synergy between the Drenopor Filter components leads to the formation of a precoat whose surface is perfectly homogeneous and free from preferential flow paths that could compromise the outcome of the filtration process. The precoat is also distinguished by its exceptional strength, which protects it from breaking and cracking.

Composition: α -cellulose fibres, fossil shell flours, perlites.

Main application: form precoats for DE filtration.

- DRENOPOR M is particularly recommended for high-yield filtration.
- DRENOPOR S can be used for "polishing" filtration.

Dosage:

- 400-700 g/m² of filter surface.
- 20-50 g/hL for DE filtration.











Our Perdomini range of cleaning products is backed up by a full assistance and advice service which not only identifies the most suitable products for each individual need, but also provides assistance with using the products, training for the staff who will use them and drawing up hygiene protocols in compliance with the most recent legislation (HACCP, safety and environment).

To draw up a suitable, detailed operations protocol, we advise you to contact the Perdomimi technical assistance service.



ACIDIC DETERGENTS

10 kg - 25 kg 250 kg

DETAR 10

Surfactant-free acidic descaling detergent

Use at % concentration: 1-3

Characteristics and main applications: solubilisation and removal of precipitates – whether inorganic and calcareous or mixed (organic and inorganic) – from the surfaces of machines, plants and separation systems.

Detar 10 is the result of development aimed at managing membrane separation systems, completing the primary cleaning process for organic material. Above all in cross-flow systems, which are required to operate in wildly differing conditions and be regenerated with water of varying hardness and composition, Detar 10 has demonstrated that it contributes significantly to the maintenance of the overall performance of the system over time.

25 kg

DETAR ACID

Acid detergent and descaling agent with surfactant

Use at % concentration: 2-5

Characteristics and main applications: detergent designed for removing inorganic deposits from the surfaces of machines and equipment. Detar Acid has been specially formulated to dissolve and remove inorganic residues, whether caused by processing operations or the utility water supply (limescale). Detar Acid's formula has been optimized through the use of surfactants and corrosion-inhibiting substances. Detar Acid produces only a limited quantity of foam and can therefore be used for circulation cleaning.

25 kg 1100 kg

DETAR ACID ASF

Acid detergent and descaling agent

Use at % concentration: 0.5-5

Characteristics and main applications: break up and remove limescale deposits and eliminate mixed residues (organic and inorganic) from tanks, pipes, pasteurizers and heat exchangers. Detar Acid ASF is particularly effective as a follow-up to alkaline cleaning operations to provide complete neutralization of surfaces and equipment.











Acid detergent and lime scale remover with a sanitizing action

Use at % concentration: 3-5

Characteristics and main applications: Detar Acid San is a more than valid alternative to traditional cleaning processes that involve initial cleaning with an alkaline product, followed by an acid and finally a sanitizing treatment, of the inside of vats, filling machines, piping or storage tanks and pasteurizers. The Detar Acid San formula has been expressly designed to avoid foam production, making this product particularly suitable for CIP and water recirculation systems.

> 25 kg 1100 kg

DETAR SAN SCHIUMA

Acidic foaming detergent and lime scale remover with added sanitizing power

Use at % concentration: 4-8

Characteristics and main applications: with the use of special equipment, the unique formulation of Detar San Schiuma leads to the production of a dense, clingy foam that makes it easy to clean vertical surfaces and walls. Also recommended to clean walls, floors and the outside of storage tanks and vats.

ALKALINE DETERGENTS

1300 kg

DETAR FLOW

Highly alkaline detergent

Use at % concentration: 1-3

Characteristics and main applications: Thanks to its power to sequester and suspend solid particles, Detar Flow is particularly effective at removing large quantities of organic contaminants from both winemaking equipment and filter membranes. Suitable for removing the high concentration of organic substances left behind in cross-flow filtration systems, especially at the final stage of the processes when the organic elements have been separated and concentrated, and form layers which stubbornly resist removal. Detar Flow has been shown to make a measurable contribution to stabilization and to the long-term continuation of filtration-system performance.

25 kg 1000 kg



ALKALINE DETERGENTS

1300 kg

DETERGENTS

DETAR MEM

EDTA-free highly alkaline detergent

Use at % concentration: 1-3

Characteristics and main applications: thanks to its sequestering action, Detar MEM is particularly effective at removing large quantities of organic fouling. As it does not contain EDTA, this product is highly suitable for use in waste water treatment and purification plants. Detar MeM is recommended for cleaning containers, tanks, pipes and pasteurizing lines using either automatic or CIP cleaning systems.

DETAR PS

Alkaline detergent with surfactant

Use at % concentration: 2-4

Characteristics and main applications: Detar PS is a product formulated specifically for the purpose of optimizing operations to regenerate cartridges and filter membranes when simple physical regeneration with water and/or steam has failed to achieve the desired results.

> 25 kg 1100 kg

DETAR SCHIUMA

Foaming alkaline detergent

Use at % concentration: 4-6

Characteristics and main applications: Medium-alkalinity foaming detergent suitable for removing stubborn organic residues (both animal and non-animal fats) from surfaces. The use of Detar Schiuma, a foaming detergent, makes it possible to carry out cleaning operations on machinery, equipment and walls where there are vertical and diagonal surfaces or any other surfaces hard to clean using traditional methods.

> 1 kg - 25 kg 1400 kg

DETAR TRE LIQUID

Caustic descaling detergent

Use at % concentration: 0.5-2

Characteristics and main applications: Detar Tre Liquid posis a highly caustic detergent, which means it has powerful degreasing and tartrate-removal effects. The inclusion of various kinds of organic sequestering agents in the formula gives this product a strong complexing action. This feature means that Detar Tre Liquid can also be used where the water is particularly hard.

10 kg 25 kg













Caustic detartrating detergent in powder form

Use at % concentration: 5-10

Characteristics and main applications: complete detergent in powder form, highly alkaline and phosphate free. Detar Tre Special is perfect for cleaning and removing tartrates from stainless steel equipment such as vats and conveyors, as well as pasteurizers, concentrators and centrifuges. It's also suitable for use on presses and filters. This product is compatible with light allovs, zinc and aluminium.

PERLAC CF/0

Powder detergent for bottle washers

Use at % concentration: 5-10

Characteristics and main applications: Perlac CF/O has been specially designed for use in bottle washers. This all-in-one formula fully satisfies all the different demands of bottle cleaning and preparation for reuse thanks to the special surfactants included in its formula. While performing its cleaning and unsticking actions, Perlac CF/O does not foam, thanks to the careful choice of non-foaming surfactants.

PERLAC CF/3

Powder detergent for bottle washers

Use at % concentration: 1-3

Characteristics and main applications: Perlac CF/3 is a complete product, rich in sequestering agents and with special highly biodegradable surfactants working in synergy with the alkaline salts to guarantee great performance every time. Perlac CF/3 has been specially designed for use in bottle washers and is particularly recommended when the water supply is especially hard. The synergic action of the alkaline environment carefully balanced with dispersing agents and surfactants allows labels to be peeled off whole, thus avoiding the problem of pumps and filters becoming clogged up. While performing its cleaning and unsticking actions, Perlac CF/3 does not foam, thanks to the careful choice of non-foaming surfactants, which best display this characteristic at temperatures of around 50-55°C.















DETERGENTS ALKALINE DETERGENTS

1400 kg

PERLAC CF/LIQUID

Caustic detergent, phosphorus-free

Use at % concentration: 1-3

Characteristics and main applications: Perlac CF/Liquid guarantees complete removal of processing residues from conveyor belts, bottling plants, pasteurizers and tanks. Its composition has been carefully studied in order to create a product that would simultaneously meet the cleaning needs of the food industry and fulfill the ever stricter requirements of the environment sector. It is a caustic product with added surfactants and sequestering agents with performance levels that allow it to be used effectively even in limit conditions (e.g. particularly hard water, even above 25°F; temperature higher than 70°C). It is also suitable for removing tartrate deposits from containers and concentrators and for cleaning floors and walls that are particularly dirty with organic matter.

PERLAC FILL

Highly caustic detergent

Use at % concentration: 1.5-5

Characteristics and main applications: Perlac Fill is a product which stands out not only for its highly caustic effect, but also for its surfactants and sequestering agents. The surfactants in its formula stop it from foaming at a wide range of temperatures and independently of the type of dirt being treated. The detergent effect of the alkaline salts is also boosted by a powerful emulsifying and suspending action. Whether in CIP or circulation cleaning, Perlac Fill can be used to clean storage tanks, pasteurizers, fillers and piping. Excellent results can be obtained when cleaning floors and walls by hand, especially anywhere there's a lot of organic dirt.

PERLAC TENDER

Alkaline detergent

Use at % concentration: 3-5

Characteristics and main applications: Perlac Tender is recommended for cleaning containers, tanks, piping and pasteurization lines, whether CIP or automatic cleaning systems are used. It's particularly effective when combined with Detar 8. It's perfect for cleaning containers, piping, tanks, bottles, pasteurizers, fillers, crate washers, etc.









CHLORINATED ALKALINE DETERGENTS

10 kg

PERLAC CLORAT PRESSE

Chlorinated alkaline sanitizer

Use at % concentration: 0.5-2

Characteristics and main applications: Perlac Clorat presse is a sanitizing detergent containing surfactants, with high sequestering power. Phosphate free. As it frees chlorine, with Perlac Clorat Presse you can both clean and sanitize in a single operation. It is particularly recommended for washing, sanitizing and removing tartrate residues from presses with stainless steel cages. It can also be used to good effect to treat conveyor belts, vats and storage tanks. When used with a high-pressure hose, it foams slightly.

25 kg

PERLAC DEGREASER

Concentrated alkaline detergent

Use at % concentration: 0.5-2

Characteristics and main applications: Perlac Degreaser is a liquid alkaline detergent rich in active substances that is suitable for the removal of particularly heavy dirt from floors and walls. The simultaneous presence of alkaline substances, chelating agents and a pool of special surfactants ensures an incisive effect on the most varied types of dirt (animal and vegetable fats, oils, dust). The chelating substances contained in Perlac Degreaser result in the use of water with high hardness as well, for the dilution of the product.

> 25 kg 1200 kg

PERLAC SAN

Chlorinated alkaline sanitizer

Use at % concentration: 0.5-1

Characteristics and main applications: phosphate-free, chlorinated alkaline sanitizer. Its high chlorine content means that excellent cleaning and sanitizing results can be attained from a single application. Perlac San can be used to clean, sanitize and remove staining from wooden barrels and from storage and fermentation tanks made of both cement and stainless steel. Perlac San is also effective when used to sanitize floors and walls. It gets rid of unpleasant odours emanating from drainage channels and gutters. It can be used as a sanitization additive in the penultimate rinse phase in bottle-washing machines.

PERLAC SAN SCHIUMA NEW

Foaming chlorinated alkaline detergent

Use at % concentration: 3-5

Characteristics and main applications: Perlac San Schiuma New is particularly effective at removing organic residues and mould. Perlac San Schiuma New is recommended in any situation where there is a need for cleaning and contemporaneous sanitization in environments and on apparatus fouled with proteins and grease. When used with a special jet pipe, the foaming agents contained in this formulation generate an exceptionally thick, sticky foam that, when sprayed on vertical walls, leads to an increased contact time with the dirt. The result is effective cleaning and sanitization in one simple operation.

10 kg - 25 kg

PERLAC SAN SPECIAL

Chlorinated alkaline sanitizer

Use at % concentration: 0.5-1

Characteristics and main applications: chlorinated alkaline sanitizer with excellent cleaning properties. Phosphate free. Its special sequestering agents mean that excellent cleaning and sanitizing results can be attained, even when the water supply is especially hard. Perlac San Special is ideal for cleaning conveyor belts, vats, storage and fermentation tanks, and for eliminating the unpleasant odours that can form in drainage channels and gutters. Perlac San Special is non-foaming, so it can be easily used in CIP systems.







10 kg 25 kg

DETAROX

Sanitizer containing peracetic acid

Use at % concentration: 0.02-0.5

Characteristics and main applications: balanced blend with an oxidating effect, containing stabilized peracetic acid and hydrogen peroxide. Its ease of rinsing and super-low foam production make this product perfect for use in filtration systems. Detarox is recommended for cleaning and removing colour staining from fermentation tanks and bottling lines. Its superlow foam production makes Detarox perfect for use in all CIP systems. It doesn't present any risk of corrosion on stainless steel, aluminium, tin-plated iron or plastics (polyethylene, for example). Lastly, the unique composition of Detarox allows it to be used at low temperatures with guaranteed great performances.

> 10 kg 20 kg

DETAROX AP

Highly effective broad-spectrum bactericidal disinfectant

Use at % concentration: 0.2-0.5

Characteristics and main applications: highly effective broad-spectrum bactericidal disinfectant containing stabilized peracetic acid, formerly classified as a medico-surgical material, now Biocide. Detarox AP is non-corrosive on a wide range of materials including stainless steel, aluminium and many kinds of plastic. It is particularly recommended for systems, surfaces or packing whose level of hygiene can influence the finished product either directly or indirectly. Its wide-ranging action spectrum, easy-rinse formula and low foaminess make it perfect for the sanitization of filtration systems.

750 ml

DETAR SPRAY S

Alcohol spray sanitizer

Use at % concentration: ready for use.

Characteristics and main applications: Detar Spray S is a ready-to-use, alcohol-based cleaner and sanitizer, suitable for cleaning surfaces and equipment used for food processing, such as conveyor belts, cappers, taps, etc., in any sector of the food industry where the proliferation of microorganisms can constitute a serious problem. This product is perfume-free and colourant-free and is compatible with all surfaces in steel, plastic and aluminium. It is a dual-action degreaser and sanitizer.



DETERGENTS FCO-FRIENDLY SANITIZING DETERGENTS



ECO-FRIENDLY SANITIZING DETERGENTS

25 kg 1400 kg





Caustic detergent free from E.D.T.A. and phosphorus

Use at % concentration: 1.5-5

Characteristics and main applications: Deco Fill does not contain phosphates or phosphonates and is completely free from phosphorus. No EDTA/NTA. Highly caustic detergent designed for use in the food and beverage industry. Deco Fill is a product which stands out not only for its highly caustic effect, but also for its surfactants and sequestering agents. Deco Fill can be used for CIP operations on processing and filling circuits.

> 25 kg 1300 kg



DECO FLOW

Caustic detergent free from E.D.T.A. and phosphorus

Use at % concentration: 1-3

Characteristics and main applications: DecoFlow does not contain phosphates or phosphonates and is completely free from phosphorus. No EDTA/NTA. DecoFlow has been developed specifically for particularly tricky operations to regenerate cross-flow filtration systems and microfiltration systems. Under normal conditions, displays exceptional compatibility with metals - steel above all - and with a very broad range of polymer and non-polymer filter membranes.

25 kg



DECO PS

Caustic detergent free from E.D.T.A. and phosphorus

Use at % concentration: 2-4



25 kg 1100 kg

Characteristics and main applications: Deco PS is a product formulated specifically to optimize filter cartridge and membrane regeneration operations whenever simple physical regeneration with water and/or steam is insufficient. Deco PS removes the organic residue clogging the filters which has accumulated during the filtering process. In particularly difficult cases to resolve – for example when faced with stubborn, sticky matter – it may be helpful to use Deco PS and Detar 8 together. This way the alkaline and oxidizing action is backed up by powerful mechanical dirt removal.

CLEANING FILTRATION EQUIPMENT AND SYSTEMS

10 kg

TITAN I

Additive for cleaning cross-flow filtration systems and apparatus

Characteristics and main applications: formulation containing dispersants and chelating agents suitable for the removal of mineral/inorganic residues

(manganese, iron, silica, aluminium, magnesium and calcium) primarily caused by the water supply, which deposits these residues inside piping and filtration apparatus, causing cross-flow filtration systems to clog up. When used after treatment with Titan O (removal of organic materials), it helps maintain efficient performance in the cross-flow filtration systems used in wineries.

5 kg



TITAN O

Enzyme-based product to enhance cleaning operations on cross-flow filtration systems and apparatus

Characteristics and main applications: Titan O is a powerful, non-foaming cocktail of enzymes that enhances the cleaning of organic residues (proteins, cellulose, starch, organic colloids from the wine, etc.) from the cross-flow filtration systems and apparatus used in wineries. Thanks to its mixture of enzymes, Titan O ensures deep but non-invasive cleaning of materials and is particularly effective at removing the red pigments and tannins found in red wines. Titan O has zero environmental impact (made of 100% biodegradable natural enzymes) and, when used routinely, it maintains optimal performance levels of filtration.



OTHER PRODUCTS

ANTISCHIUMA

Silicon-based defoamer

Characteristics and main applications: silicon-based defoamer in an aqueous emulsion, formulated using nonionic surfactants. This defoamer, as it contains only nonionic emulsifiers, does not lead to any interference with anionic or cationic substances. Defoamers are useful products in wineries, food processing facilities and beverage production plants with purification systems, especially when the nature of the liquids in the drains carry large quantities of foaming substances, whether as a result of the production process or following cleaning and sanitizing operations. The emulsifiers used are completely biodegradable and all the raw materials used are FDA-approved.

10 kg - 25 kg 200 kg - 1100 kg

DETAR 8

Peroxide-based detergent

Use at % concentration: 1-2

Characteristics and main applications: specially designed for the removal of particularly difficult food residue. Thanks to the lack of foaming and the presence of sequestering agents, the best use for Detar 8 is in CIP systems, always in conjunction with an alkaline product such as Detar PS. The effectiveness of Detar 8 is perfectly exploited in the delicate operation of periodically regenerating filter cartridges.

25 kg

PERLAC NASTRI

Lubricant for conveyor belts

Use at % concentration: 0.8-2

Characteristics and main applications: this lubricant for conveyor belts performs both a detergent and a sequestering action. It's a crucial aid to keeping bottling and packaging lines running smoothly. Perlac Nastri has been specially formulated in order to help conveyor belts run more smoothly. As well as improving productivity, Perlac Nastri also keeps the various components of conveyor belt systems in good working order for longer. Thanks to its special formula complete with surfactants, Perlac Nastri adds top cleaning power to its crucial role as a lubricant, thus ensuring the emulsification of any residues left behind by accidental bottle breakages.



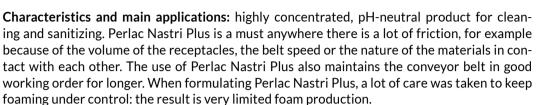


DETERGENTS OTHER PRODUCTS

PERLAC NASTRI PLUS

Lubricant for conveyor belts

Use at % concentration: 0.2-0.4



25 kg - 200 kg 1000 kg

PERLAC NASTRI SPECIAL

Lubricant for conveyor belts

Use at % concentration: 0.2-0.4

Characteristics and main applications: pH-neutral belt lubricant with added cleaning and sanitizing power. Perlac Nastri Special contains special substances which work together to form a thin and effective lubricating layer between the conveyor belt and the bottles. This drastically reduces the amount of friction, consequently improving the efficiency of the conveyor, with fewer bottles tipping over or becoming stuck because of the belt moving jerkily. Moreover, thanks to this product the belt stays intact and in good working order for longer. Perlac Nastri Special performs a sanitizing action.

25 kg

PERLAC NEUTRO

Detergent with surfactants for general use

Characteristics and main applications: detergent based on efficacious vegetable-origin solubility enhancers acting in synergy with surfactants, emulsifiers and dispersing agents in a pH-neutral formula. With Perlac Neutro you can be sure your surfaces won't suffer from corrosion and your cleaning staff won't be exposed to hazardous chemicals. It's also an extremely versatile product, as it can be used for cleaning with both manually operated apparatus and automatic devices. Perlac Neutro can be used to clean the floors in warehouses and processing rooms - especially those where wheeled vehicles pass through - as well as offices and laboratories.

200 kg









Winemaking products



Perdomini offers a complete range of products for the various stages of winemaking, including yeasts, fermentation starters, bioprotectors, stabilizers, fining agents, enzymes, tannins and alternatives to wooden barrels.



All our products have been formulated as the result of targeted experimentation programmes and each one arrives brings its own unique philosophy to your winery.



Each product that makes it through the selection process is further tested both in-house and at independent laboratories or testing agencies so that our customers can be sure what they're buying is reliable, compliant and safe for end consumers.



By blending careful selection of ingredients, preparation of the formulas following precise protocols, scrupulous hygiene practices and care for the environment, Perdomini is a guarantee of quality products in your winery.







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Inspired by nature.







