



Vason Winemaking | Wine Ingredients

#### **VASONGROUP & ENOLOGICA VASON**

incapsulates the know-how of the winemaking industry, giving life to innovative solutions and products for winemaking and the food industry around the world.

- Yeasts
- Nutrients
- Enzymes
- Carbon
- Inactivated yeast products
- Clarifiers
- Stabilizers
- Tannins

#### CERTIFICATIONS

- UNI EN ISO 9001:2015 Quality Management System
- IQ NET Certificate ISO 9001:2015 -**Quality Management System**
- Food Safety System Certification (FSSC) 22000
- KOSHER Certification
- **KOSHER** Certification Passover
- Certificate of conformity IT BIO 009
- HALAL Certification

CHR HANSEN Improving food & health

#### **CHR HANSEN YEAST & BACTERIA**

Chr. Hansen has been both a pioneer and a leading industry player helping viticulturists and winemakers to better understand wine microorganisms and their interactions. We take our evolving knowledge and apply it to the management of alcoholic and malolactic fermentations in order to fully release nature's potential.

- Yeast
- ML Bacteria

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CHR HANSEN YEAST STRAINS



#### Pure cultures of Saccharomyces species

**MERIT** - is a robust *Saccharomyces cerevisiae* strain for heavier or high-alcohol reds and whites.

**JAZZ** - fast and reliable alcoholic fermentation, mainly on rosé and red wines. Creating interesting aromatic profile in the direction of spicy fruitiness.

#### Mixtures of Saccharomyces and non-Saccharomyces species

**SYMPHONY** - is a mixture of *Sacch. cerevisiae* & *Kluveryomyces thermotolerans*, for fruity, complex white or lighter red wines.

**MELODY** - provides more pronounced non-*Sacch*. yeast effects compared to Harmony, for medium to heavy reds.

**OCTAVE** - Viniflora OCTAVE is a pure strain of *Lachancea thermotolerans* (formerly *Klyveromyces thermotolerans*) selected for its capacity to increase the acidity in white and rosé wines and adding to the flavor complexity with stone fruits notes. Specifically recommended for white and rosé grapes varieties from warm/hot climate regions.

#### Non-Saccharomyces species

**PRELUDE** - is a pure strain of *Torulospora delbreuckii*, to increase complexity. You MUST use your selected strain of *Saccharomyces* along with Prelude. Maximum 25 mg/L total SO<sub>2</sub> added to the juice.

**CONCERTO** - is a pure strain of *Kluyveromyces thermotolerans* which MUST be used with your choice of *Saccharomyces* yeast strain. It promotes complexity and mouthfeel, and complex aromas.

**FROOTZEN** - is a FROZEN culture of a pure strain of *Pichia kluyveri*, to increase fruitiness and volatile thiols. It MUST be used with a selected strain of *Saccharomyces* yeast. For a more pronounced effect, wait for a drop of 6-7 Brix after adding FrootZen, before adding *Saccharomyces* yeast.

## VASON YEAST STRAINS



#### Premium Range - Saccharomyces cerevisiae

**Premium Prox**: Saccharomyces cerevisiae. Yeast strain characterised by aromatic finesse and fermentative efficiency to properly reflect the style. Selected for the production of still wines and to processing of fine sparkling wines.

• It does not produce reduced sulphur compounds.

• Excellent resistance to alcohol, sulphur dioxide, pressure and difficult fermentation conditions

**Premium 3MH:** is the ideal strain for white wines of clear, clean and intense thiolic characteristics. Excellent expression of thiolic typicity is possible for Sauvignon blanc as well as varieties such as Riesling, Chenin Blanc and Gewurztraminer. Highly suited to Rose where thiolic characteristics are present such as with Merlot

**Premium Tiol**: Used to obtain very clear and direct thiolic expression of 3MH, 3MHA. Premium Tiol is perfectly suited to Sauvignon blanc and Chardonnay where strong fruit sensation is key to the style.

**Premium Supertuscan:** Isolated from within the Chianti Classico zone close to Siena. Selected for its excellent fermentation qualities including simultaneous MLF and a clear affinity with Italian grape varieties. Effective over a broad temperature range of 15-30°C and alcohol tolerant up to 17%. Suited to Sangiovese, Montepulciano, Lagrein and other reds such as Syrah and Bordeaux varietals.

**Premium Zinfandel** – A strain sourced from Italian Primitivo (Zinfandel) fermentations. Selected specifically for high alcohol tolerance to 19%. Effective from 14-35°C with high glycerol production and neutral aromatic characteristics. With low anthocyanin absorption Premium Zinfandel is ideal for high sugar red musts, finishing or restarting red wine fermentations.

#### Premium Range - Saccharomyces bayanus

**Premium Fructo:** Strong fructophilic strain selection for specific fermentation situations such as sluggish or stuck fermentations, rapid fermentation to dryness, an incocula for completion of fermentation, sparkling base wines and secondary fermentations in sparkling wine production. Tolerant of adverse conditions of sulphur dioxide, varying pH levels, and alcohol up to 18%. Ferments most effectively at 18-30 degrees producing neutral aromatics and moderate to high levels of glycerol.

## VASON YEAST STRAINS



#### **Classic Range - Saccharomyces bayanus**

**Classic Bayanus:** Particularly resistant to adverse factors such as alcohol, sulfur dioxide, pH and low temperatures (11°C).

Classic Bayanus expresses its characteristics best during refermentation for producing sparkling wines, giving the product freshness and fineness. It is recommended in bottle fermentation for producing sparkling wines; furthermore, it is particularly recommended in wines which have been subject to stuck fermentation.

#### I Fruit<sup>®</sup> and COMBO APPROACH<sup>®</sup> lines - *Saccharomyces cerevisiae*

**Vason I Fruit Red /VP5** Strain suited to full aromatic and palate expression in light to medium bodied reds from novello to classic table wines.

Ideal in New Zealand conditions for Pinot noir, Gamay. Excellent performance in Rose' wine styles where it gives very lifted fruit aromas. Tolerant up to 16% potential alcohol.

#### Vason Combo XT

Mixed Saccharomyces selection for complex thiolic wines. The strain shows alcohol tolerance to 15.5% and operates across a temperature range of 12-30 degrees. Up to 40% reduction on malic acid is possible. Combo XT is a strain suited for complex thiolic wines including barrel fermented and lees matured styles. And Ideal selection for Reserve Sauvignon blanc and Chardonnay styles.





#### YEAST STRAIN GUIDE – White Wine Yeasts

Strain	Species	Alc. Tolerance % Alc	Alc. Conversion %vol/g sugars	Temp. range	SO2 production	Malic acid production	Glycerol production	Sensory profile
Classic EX2	Sacch. cerevisiae	15	0.005 8	10-30	Low	35-45%	High	Clean, Fresh, Fruity.
Classic Aroma	Sacch. cerevisiae	15	0.057	14-28	High	25-35%	Average	Phenylethanol producer (floral characteristics)
Classic Bayanus	Sacch. bayanus	15	0.057	11-30	Average	20-30	Average	Clean, neutral.
Premium Chardonnay	Sacch. cerevisiae	15	0.059	14-28	Low	35-45	High	Clean, expressive aromatics with very broad textural and voluminous palate.
Premium Blossom	Sacch. cerevisiae	14	0.058	10-30	Low	25-35	Average	Clean, floral expressive aromatics.
Premium 3MH	Sacch. cerevisiae	14	0.06	14-25	Low	10-20	Average	Strong thiolic strain. Varietal expression for thiolic varieties and styles. Whites, Rosé.
Premium Tiol	Sacch. cerevisiae	14.5	0.06	14-25	Low	10-20	Average	Focussed thiol expression. Purity and freshness.
Premium Fructo	Sacch. Bayanus	18	0.054	18-30	Low	18-35	High	Neutral expression from fermentation.
Combo XT	Mixed Sacch. cerevisae	15.5	0.059	14-30	Low	30-40%	Medium	Mixed strains of <i>Sach.cerevisiae</i> blended to enhance thiols and provide texture. Good sur-lie ageing strain for barrel fermented thiolic wines.

YEAST



Strain	Species	Alc. Tolerance % Alc	Alc. Conversion %vol/g sugars	Temp. range	SO2 production	Malic acid production	Glycerol production	Sensory profile
I-fruit Red (VP5)	Sacch. cerevisiae	17	0.058	12-30	Low	~25%	Average	Fruit expressive, red berry, cherry. Suited for Rosé and red wines such as Pinot noir, Gamay, St.Laurent, Grenache, Tempranillo. Low anthocyanin adsorption.
Premium Rouge	Sacch. cerevisiae	17	0.057	17-30	Low	25- 35%	High	Produces clean, elegant, well rounded wines with glossy fruit and fine varietal definition. Bordeaux isolate. Suited to all red varieties. Low anthocyanin adsorption.
Premium Supertuscan	Sacch. cerevisiae	17	0.057	15-30	Low	10-20	High	A Vason isolated strain selected from the Chianti Classico vineyards surrounding Siena (It). A speciality for Italian varietals such as Sangiovese, Montepulciano, Barbera. Low anthocyanin adsorption.
Premium Zinfandel	Sacch. cerevisiae	19	0.059	14-35	Average	25-35	High	A Vason isolated strain selected from Salento (It). Targeted towards the clean and effective fermentation of high potential alcohol red wines. Neutral in aromatic contribution. All red wine styles. Low anthocyanin adsorption.

## Nutrients

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#### **V ACTIV PREMIUM**

Complete fermentation and rehydration nutrient to supply essential fermentation substances while adsorbing of toxic factors.

- Composition enhances cell vitality in yeast rehydration.
- Conducts smooth and clean fermentations.
- Also optimal for second fermentation starters.

#### \*NEW PRODUCT \* SMARTVIN<sup>®</sup> CLASSIC – PELLETISED NUTRIENT – 15kg bag format

- 40% Inactivated yeasts and autolysates
- 30% DAP
- 29.94% Microground cellulose
- 0.06% Thiamine
- Rehydrate in 1:10 cold water for 30 minutes then add. Nutrition absorbs into cellulose for gradual release.
- ~ YAN adjustment 24ppm/100ppm SMARTVIN<sup>®</sup>CLASSIC

#### V ACTIV SCORZE - MANAGING STATIONARY PHASE

Specific for the management of sluggish and stuck fermentations. Recommended in the management of high potential alcohol fermentations.

- 100% yeast hulls with high adsorbent action against antagonistic C8-C10 fatty acids.
- Highly adsorbent towards undesirable aromatic esters produced under conditions of stressed fermentation.
- To avoid sluggish fermentations, apply in the stationary phase of fermentation up to 200 ppm.

#### EASY ACTIV HULLS – BIOREGULATOR

Specific for the prevention of sluggish and stuck fermentations. Highly recommended in the case of high potential alcohol fermentations.

- 100% yeast hulls with high adsorbent action against antagonistic C8-C10 fatty acids.
- Stimulatory as a fermentation nutrient.
- Can be added prior to inoculation.

#### **THIAMINE – ESSENTIAL MICRONUTRIENT**

Alcoholic fermentation bio-regulator. Thiamine hydrochloride (Vitamin B1), pure, totally water soluble. Excellent regulator of yeast activity, it limits the production of undesirable secondary elements for clean final products.

## **VASON YEAST NUTRIENT CHART**

Nutrient	Composition	Timing of use	Used at rate recommended	Preparation	NH4 ppm Per 100 ppm nutrient	Amino nitrogen ppm/100p pm of product used	YAN total per 100 ppm product used	Thiamine as % composition and mg/hL per 100 ppm	Comments
V- Activ Premium	DAP, Amino nitrogen, cellulose thiamine	Rehydration and/or 2 <sup>nd</sup> quarter of ferment after exponential growth phase but before 50% sugar reduction from start measurement.	Rehydration use at 24 g/1kg ADWY Fermentation 40-100 ppm	20% in Water, stand 30 minutes before application	25 ppm	7 ppm	32 ppm	0.06% 6 mg/hL per 100 ppm product used	Recommended in particular for highly clarified musts and ADWY rehydration.
V-Starter Premium	Amino nitrogen Thiamine	Add after inoculation	15-40 ppm in fermentation	20% in Water. No standing time required.	NA	31 ppm	31 ppm	0.15% 15 mg/hL 100 ppm product used	Recommended for all fermentations including stuck fermentations.
V-starter Arom	Amino nitrogen	Lag and Exponential phase where antioxidant effect of GSH* is desirable. Compatible with other Vason nutrients.	15-40 ppm in fermentation	20% in Water. No standing time required.	NA	12 ppm	12 ppm	Nil	Recommended for aromatic white wine musts. Add early to utilise benefits of GSH*.
V-Starter TF	Amino nitrogen, thiamine	Add from beginning of exponential growth phase.	15-40 ppm in fermentation	20% in Water. No standing time required.	NA	33 ppm	33 ppm	0.15% 15 mg/hL per 100 ppm product used	Recommended for fruit driven white wine styles.
V-Activ Scorze	Yeast hulls	Add after 50% fermentation	20 ppm Up to 40 ppm to detoxify stuck fermentation	Minimum water required to suspend.	NA	7 ppm	7 ppm	Nil	Recommended in musts of high potential alcohol.
Booster- Activ Premium	Yeast Hulls 50% Cellulose 49.9% Thiamine 0.1%	Add after 50% fermentation	100-300 ppm	20% in Water, stand 30 minutes before application	NA	0.4 ppm	0.4 ppm	0.1% 10 mg/hL per 100 g product used	Recommended addition in all fermentations to prevent stuck fermentation.

#### REMINDERS

- AMMONIUM SALTS BEFORE 50% FERMENTATION COMPLETED.
- AMINO NITROGEN IDEAL AT REHYDRATION AND INOCULATION.
- OXYGEN IS BENEFICIAL AT THE END OF EXPONENTIAL AND MID STATIONARY PHASE.
- MICRONUTRIENTS AND DETOXIFYING FACTORS AFTER 50% FERMENTATION.

Regulations: Please check the regulations in countries where you export your wine. Some countries have restrictions that are NOT the same as for NZ wineries making wine for domestic sale. Refer to the current New Zealand Winegrowers International Winemaking Practices Guide.

# MALOLACTIC FERMENTATION

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Improvi	ing food & her	dth		
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#### CHR\_HANSEN

Improving food & health

#### Viniflora<sup>®</sup> bacteria range for winemakers

	Wine colour	MLF Flavours	Temperature	Alcohol Tolerance	Min. pH	Total SO <sub>2</sub>	
<b>Viniflora® CH35</b> The hard worker	red, rosé, white	Yes	15-25°C	14% v/v	3.1	45ppm	Promote diacetyl High SO <sub>2</sub> Secure MLF
	red, rosé, white	No	17-25°C	14% v/v	3.2	30ppm	Fruit driven reds Whites without MLF flavours
<b>Viniflora<sup>®</sup> CH11</b> The fast track	red, rosé, white	Yes	14-25°C	15% v/v	3.0	35ppm	Low pH/ Low Temp Fast MLF
Viniflora <sup>®</sup> Oenos The classic	red, rosé, white	Yes	17-25°C	14% v/v	3.2	40ppm	Most wines
Viniflora® CH16 The character	red, rosé, white	Yes	17-25°C	16% v/v	3.4	40ppm	High alcohol High maturity

## **FREEZE-DRIED BACTERIA**

#### **Chr. Hansen ML Cultures**



**Viniflora Oenos** (red/white/rose) - This is a versatile strain, intended for most wines. We have had great success with this culture on many kinds of wines, since 1992. It has good all-round tolerance and a clean, classic flavour profile.

**Viniflora CH-11** (red/white/rose) - Specially selected for its tolerance to low-pH or temperature (not both at once). Do not exceed 45 mg/L total SO<sub>2</sub> at inoculation (be sure to test SO<sub>2</sub> level).

**Viniflora CH-16** (red/rose) - Best for higher alcohol red wines, CH-16 was selected from a California Syrah to conduct MLF at alcohols of up to 16 % (depending on other factors) with pH above 3.4. It is the best bacterium to use for reds with 14+ % alcohol.

**Viniflora CH-35** (white/rose) - CH-35 was selected for MLF in difficult white wines, and is more tolerant to low pH and SO<sub>2</sub> than most strains. It is the best choice for wines fermented with bayanus yeast strains or strains producing larger amounts of SO<sub>2</sub>. Also use CH-35 if lysozyme has been added to help prevent ML spoilage during yeast fermentation.

**Viniflora CiNe** (white/rose/red/sparkling wines) - CiNe does not produce diacetyl, so it retains freshness and fruitiness, without adding a buttery note. Many wineries are excited about having MLF without the 'buttered-popcorn' odor. It is more sensitive to SO<sub>2</sub> than some other strains.

**Viniflora NoVA** (white/rose/red/sparkling wines) - Nova is a frozen concentrated pure culture of Lactobacillus plantarum. It is a homofermentative malolactic bacteria in must and wine conditions which has been selected to ensure a fast and safe malolactic fermentation in must. It has therefore a very low tolerance to alcohol.

## **ML NUTRIENTS**

Wines having trouble completing MLF despite favourable conditions are often depleted of nutrients and will need nutrient

#### **BACTIV-AID 2.0 – CHR HANSEN**

Produced from inactivated yeast, Bactiv-Aid 2.0 has a two-fold effect on malolactic bacteria. It ensures that there is a sufficient level of organic nitrogen for MLF, by being rich in the particular amino acids required, giving a Bacterial Assimilable Nitrogen (BAN) level of at least 60mg/L. Bactiv-Aid 2.0 is also very effective at binding medium-chain free fatty acids which can be very inhibitory to populations of *Oenococcus oeni*.

#### **V MALO ACTIV - VASON**

V MALO ACTIV is an activator specifically formulated to provide the most suitable nutrients in wine for malolactic fermentation agents.

The high content of yeast cell walls composed of polysaccharides and yeast catabolites ensures the adsorption of toxic substances for the bacteria (fatty acids) and stimulates cell development, ensuring quick malolactic fermentations without affecting the organoleptic characteristics of the wine. Its composition, which is the result of carefully selected raw materials, is balanced in order to provide all the micro-elements which are necessary to bio-regulate bacteria metabolism. This ensures to overcome hostile fermentation juice conditions, and to ensure a cleaner malolactic fermentation with a lower risk of undesired metabolites production.



Viniflora oenos ML bacteria



## ENZYMES







#### **EXTRARED L**

#### For reds

Liquid pectolytic enzymatic compound with high color extracting activity for red wines. The formula was developed in particular to help, in the final stages of maceration, with the extraction of essential compounds for the formation of stable compounds with the anthocyanins

#### ZIMAFLOW

#### For reds and whites

Pectolytic and beta-glucanasic liquid enzymatic compound for the improvement of wine clarification and filterability. It is able to specifically breakdown pectins, glucans and polysaccharides, while respecting the characteristic qualities of the wine being treated.

• Used on wines before bottling, it improves filterability indices so as to facilitate the process towards final filtration.

• On highly turbid wines, increases the speed of spontaneous clarification.

#### ZIMAFRUIT

#### For red and white

Pectolytic granular enzyme, specific for clarification and releasing the varietal aromatic components from the grape skins.

- Perfectly suitable for use on grapes and musts, also in maceration.
- Created to obtain varietal and aromatically expressive wines.

• No anthocyaninic activity; accordingly, it can be used advantageously also for red vinification.

#### **ZIMARED PLUS**

#### **For reds**

Granular pectolytic enzymatic compound for the production of red wines, aiding the extraction of anthocyanins and polyphenols.

- Increases speed of anthocyanins extraction.
- Encourages the extraction of grape polyphenols.
- Allows reduced contact times and the number of punch downs and pump overs required.
- Improves clarification and filtration operations.
- Increases the liquid/solid yield.

# **X-PRO**°

Bactoclean

Identity Red

Grapes

**Finesse** 

**Identity White** 

Verve

### Protection

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### **INACTIVATED YEAST PRODUCTS**



#### X-PRO Identity Red

#### For reds

Specific inactivated yeasts (SIY) with high parietal mannoprotein content, lipidic substances and polysaccharides.

- Improves the sensations of balance and roundness.
- Helps improve colour stability.
- Reduces vegetal and bitterness and astringency

#### **X-PRO Identity White**

#### For whites

Specific inactivated yeasts (SIY) with quick release of mannoproteins, lipidic substances and polysaccharides. It actively reacts with the vegetal and bitter components of the wine, conferring roundness and better expression of the variety and territory.

- Also recommended in maturation prior to pre-bottling filtrations.
- Helps to improve the protein and tartaric stabilization in wine.

#### X-PRO BACTOCLEAN

#### For all wines

Polycompound clarifying agent with stabilizing action. It contains three synergistic elements: an inactivated yeast obtained through X-PRO<sup>®</sup> Process, fungal chitosans (Aspergillus niger) and a potato protein selected to improve clarification.

- •Reduction in undesirable micro-organisms through chitosans.
- •High stabilizing action towards redox status via the inactivated yeast.
- •Clarifying action through potato protein.

#### **X-PRO Protection**

#### For all wines

Specific inactivated yeasts (SIY) with high polysaccharide, mannoprotein and glutathione content. It has a significant reducing capacity and active action on wine oxidation.

- Prevents wine oxidation.
- Active on already-oxidize components.
- Can be used during clarification.

#### **X-PRO Grapes**

#### For white and Rose juices

Polycompound product formulated by observing the synergic activity between an inactivated yeast obtained through the X-PRO<sup>®</sup> Process and some specific fungal chitosans (*Aspergillus niger*).

- Natural redox protection for white and rosé musts.
- Stabilizing action.
- Ideal for reduced use of sulphites.

# Carbon, Flotation, Clarification



### Bentonite

#### BENTONITE

#### **PLUSGRAN GEL**

Activated granular sodium bentonite with strong deproteinizing action.

• Ideal for the removal of heat unstable protein at low dosages.

5 - 30 g/hL wines

15 - 30 g/hL musts

#### **FLOTTOBENT**

Activated sodium bentonite in powder form specific for floatation.

- Odourless, composed of very high purity selected montmorillonites.
- High swelling capacity.
- Easy dispersion in water without the formation of lumps.
- High deproteinizing action.
- Can be used in static clarification, fermenting musts and wine.
- Best determination for rates in floatation is by minifloat trial.

#### **MASTERVIN COMPACT**

Activated granular sodium bentonite with strong deproteinizing action in preparatory formulation with silica to enhance settling properties. An excellent product for small volumes, premium tier or any wines where minimizing lees losses or processing is a critical consideration.



#### **SMARTVIN® CARB**

Very pure vegetable carbon, agglomerated into pellets.

The use of SMARTVIN<sup>®</sup> CARB decisively limits dust formation in the working environment: a highly effective carbon and the respect of the workers!

SMARTVIN<sup>®</sup> CARB has good decolouring power and excellent adsorbing power for both anthocyanins and easily oxidisable oligomers, which are a cause of instability in white wines. It is suitable for static clarification, filtration, and also flotation, due to its structure

#### **CARBOCROMOS ENO**

High purity activated decolorizing carbon.

- Intense decolorizing action.
- Low content of leachable metals.
- Adsorbent action of anthocyanins and easily oxidizable oligomers, which can be a source of instability in white wines.
- For a clear removal

Up to 100 g/hL

#### **CARBOCROMOS SUPER**

High purity activated adsorbent carbon with low decolorizing action in powder form.High specific adsorption surface.

• Fight specific adsorption surface.

Low content of leachable metals.

20 - 30 g/hL stuck fermentation 50 - 100 g/hL difficult cases

#### **FLOTTOCARB**

Powdered activated vegetable carbon with the ideal chemical-physical characteristics to easily adhere to the floatation gas.

• Adsorbent action, particularly effective in relation to anthocyanins and easily oxidizable oligomers, which can be a source of instability in white wines.

• High decolorizing action without modification of the organoleptic qualities of the treated product.

Up to 100 g/hL



## Clarifying,

#### CLARIFYING Allergen Free/NON-Animal derived/no microplastics

FITOFERM A synergistic clarifier for use in musts, ferments and wines. Combining cellulose as an adsorbent and yeast support, pea protein for gentle fining and bentonite for clarification Fitoferm is devised not only to gently fine and clarify wines. An added factor is that when added to fermenting must the effect is to support yeast in suspension. Excellent lees settling properties. Seen as an alternative to the microplastic PVPP Fitoferm fits modern winemaking objectives in terms of wine quality, minimization of the number of individual materials required, packaging format and environmental impact.

#### Suggested rates

20-50 g/hL in juices before ferment. 30-80 g/hL in fermenting musts.

#### FITOPROTEINA P – Vegetable protein from Pea – Non-Allergen

Plant-based clarifying agent in powder form. Isolated for low electrical charge with removal action specific for astringent tannins.

• Works on a sensory profile, removing the most astringent and rough polyphenols in the form of tannin-protein compounds.

- Recommended clarification agent throughout wine finishing.
- Respecting the color, improves its tone and brilliance.

#### Suggested rates

- 5 20 g/hL reds
- 2 10 g/hL whites
- 5 20 g/hL musts

#### FITOPROTEINA XP – Vegetable protein from Potato – Non-Allergen

Plant-based poly-compound formulation with a specific clarifying activity; powder form. Formulated to assist clarification while respecting the wine's original sensory characteristics.

Suited to floatation and static clarification as a replacement for animal gelatines.

#### Suggested rates

5 - 20 g/hL for wines and musts



#### **PROTEOTEST**®

A new approach to assessing protein stability

Proteotest<sup>®</sup> is an analytical method created by VASONGROUP's Research & Development Division. For assessment of protein stability in wine under oenological conditions in an extremely reliable and rapid manner. Results may be assessed either visually or with a turbidimeter.

Based on applying a specific selection of tannins that are extremely reactive with proteins, Proteotest<sup>®</sup> does not introduce arbitrary alterations to the wine system. It is therefore a test to most truthfully simulates the real mechanism of protein instability in wine.

The test can be applied for the evaluation of the protein stability of a wine sample, as well as in trials to identify the correct dosage of bentonite required to achieve protein stability: in this case, it will be necessary to undertake stabilization tests in the laboratory and perform the Proteotest<sup>®</sup> on these.



#### Packaged contents:

- 30 test tubes with reagent (each tube has enough reagent for 8 individual tests).
- 3 x 100 mL containers of buffer solution
- The information from Proteotest<sup>®</sup> leads to greater respect of the integrity and sensory quality of the wine to be treated.

The test is conducted at room temperature and results are obtained in a few minutes.

- Filter or centrifuge wine sample. Filter using PVDF filter media to avoid protein removal.
- With 50mL (NTU chamber) of sample obtain an NTU reading and record as filtered turbidity (T1).
- Add 1,25mL of the reagent and mix well. Allow this to stand for 5 minutes.
- Make a new turbidity reading after 5min (T2)
- ΔT2-T1 >15 = Unstable







1st prize in Winemaking category at the Wine Industry Impact Awards 2018

## Tannins







#### Why use oenological tannins? Just a few reasons...

- Protection of your wines and musts from oxidation/reduction effects.
- Excellent control of the sensory profile can be obtained with measured effect for rate of addition.
- Multiple benefits both chemical and sensory in one product.
- Improved quality of wine within sensible cost of production.
- Vason tannin products are exceptionally well researched, developed and constantly checked for the desired qualities and consistency of performance.

#### **Different tannins for different activities**

**Oxygen reactivity** – Gallic tannins are more reactive than all other tannins in the consumption of oxygen. More impactful on the sensory profile. Introduce early in production as sacrificial tannins.

#### **Ellagic and catechinic tannins**

Low to intense sensory profiles depending on product. All with capacity to reduce dissolved oxygen, colour stabilizing in partially aerobic conditions. Sulphide mitigation in some cases depending on the product.

#### **Electrical charge**

Ellagic tannins possess a high electrical charge conferring excellent colloidal aggregation and clarification properties.

#### TI PREMIUM <sup>®</sup> SG

Granulated **catechinic** tannin derived from green tea. Obtained through a delicate extraction process and spray dried for excellent solubilization.

- Excellent redox management tool.
- · Highly reactive to anthocyanins and oxidase enzymes
- Mild clarifying action.
- A noted capacity for dissolved oxygen consumption (1g/hL Ti Premium: 1 mg/L DO2)
- Low sensory impact so can be used at with frequency and/or high rates.
- Suited to all wine styles from harvest to finishing. Especially with the following.
- Lower/no sulphite winemaking, maintaining free sulphurs by intervening with oxygen before sulphite.
- Managing reduced sulphides without copper, especially pre-bottling.
- Stabilising anthocyanin.
- Protecting musts from oxidation when added at harvest (harvester, press, juice receival). Can be mixed with sulphur for field solutions. For example, 50-100 ppm PMS solution add 20-100 ppm Ti Premium depending on conditions.





#### CATECHINIC TANNINS – NON-HYDROLYSABLE

#### PREMIUM <sup>®</sup> VINACCIOLO SG

An elegant granulated product made with highest quality condensed tannins, the result of rigorous selection from the best tannins obtained from grape seeds with the following characteristics.

- Maintains wine redox stability over time with high reactivity to dissolved oxygen.
- High reactivity to proteins as well as color matter; low clarifying activity.
- Its finesse and reactivity make it suitable for use from vinification up to pre-bottling.
- Enhances Fruit sweetness and structure at very low rates of addition.

Suggested use rates 5 - 10 g/hL reds 3 - 5 g/hL rosés

1 - 5 g/hL whites

#### **PREMIUM ® UVA SG**

An elegant granulated product made with condensed tannin derived from grape.

A direct reflection of the tannin composition naturally contained in grape skins with the following characteristics.

- High reactivity to proteins and color matter, along with moderate clarifying action.
- Excellent effect in terms of redox stability through to bottling.
- Enhances and maintains the freshness of the wine at low dose rates.
- Enhances sense of fruit sweetness and structure.
- Creates wines that are aromatically more complex, and full bodied.
- Excellent synergy can be obtained with Premium Vinacciolo <sup>®</sup> SG

#### Suggested use rates

- 5 10 g/hL reds
- 3 5 g/hL rosés
- 1 5 g/hL whites





#### **ELLAGIC TANNINS - HYDROLYSABLE**

#### **PREMIUM ® LIMOUSIN SG**

Versatile and very fine granulated ellagic tannin obtained from **untoasted** French oak.

- It can be used successfully to provide stability.
- Its sensory delicacy allows it to be used also in white wines to ensure longevity and fragrance.
- Soft sensory profile of sweet spices. Vanilla, clove, cinnamon.
- Excellent redox regulator, it provides the product with considerable stability against oxidation over time.
- Moderate clarifying action.
- Ideal for second fermentation and finishing treatment; also excellent in vinification.

Suggested use rates

- 5 30 g/hL reds
- 1 5 g/hL rosés
- 1 5 g/hL whites

#### **PREMIUM ® TOSTATO SG**

Granulated ellagic tannin from the finest toasted French oak

- Extremely elegant impression at low doses.
- Provides stability and longevity including as an antioxidant.
- Suggested application in the later stages of wine production (late maturation to finishing).
- Light clarifying action

Suggested use rates

- 1 15 g/hL reds
- 1 5 g/hL rosés
- 1 5 g/hL whites

## TANNINS



#### **PREMIUM ® WHISKY LATTONE SG**

Granulated ellagic tannin from the finest untoasted American oak.

- Possesses delicate organoleptic characteristics that supports the structure of all levels of wine without a dominating influence.
- Very suitable for use in red wines in stabilising anthocyanin.
- Can be used for structuring stages with moderately aerobic environments such as in barrel maturation and during MOX.
- Useful for finishing in pre-bottling phases at a lesser dose rates).
- Accentuation of fruit sweetness. High concentration of vanilla lactone compounds.
- Gentle clarifying action.

#### Suggested use rates

- 1 15 g/hL reds
- 1 5 g/hL rosé
- 1 5 g/hL whites

#### V TAN<sup>®</sup> SG

A granulated compound of catechinic (green tea), gallic (Tara/Gall nut) and ellagic tannins (Chestnut/Oak) that act synergistically for colour stabilization and the structuring of red wines.

- Recommended from the crushing to the "structuring" stage", where there are partially aerobic conditions. Catechinic component effective in anaerobic conditions, Ellagic aerobic, gallic tannin acts as sacrificial antioxidant and laccase inhibiting factor.
- Produces a clarifying action which can aid entering barrel fill phase with clearer wines lowering lees content and microbial load.
- Lower dose rates can be applied.
- A very sensitive organoleptic tannin providing both protection and stability
- 500 g and 20 kg packaging formats

Suggested use rates 10 - 30 g/hL reds 3 - 8 g/hL rosés





#### **COLORSTAB** ® SG

A granulated compound of catechinic (green tea), gallic (tara, gall) and ellagic tannins (French oak) that act synergistically for sensory balance and stabilization of red wines.

- The reference product for color stability suited to all tiers of wine including ultra premium.
- Recommended from the crushing to the "structuring" stage", where there are partially aerobic conditions. Catechinic component effective in anaerobic conditions, Ellagic aerobic, gallic tannin acts as sacrificial antioxidant and laccase inhibiting factor.
- Produces a clarifying action which can aid entering barrel fill phase with clearer wines lowering lees content and microbial load.
- Lower dose rates can be applied during maturation to protect against oxidation and stabilize anthocyanin.
- Compatible with controlled microxygenation (MOX-V) and/or passive oxygenation through barrel ageing.
- Well-balanced on a sensory level helping maintain the wine's structure over time.
- 500g, 5 kg and 20 kg packaging formats.

Suggested use rates 10 - 40 g/hL reds 3 - 8 g/hL rosés

TANNINS





5.P.A. 8

BioGro Registrations valid until 30 November 2023

Product Type	Product name	BioGro	MPI OOAP EU, UK, Swz MPI	MPI OOAPUS DA NOP	00AP Taiwan	COR	Restriction
Clarification	Fitoproteina P	Yes	Yes	Yes	No	Yes	Not permitted for Taiwan
Preservative	Ascorbic acid	Yes	Yes	Yes	Yes	Yes	NA
Pectolytic Enzyme	Extrared L	Yes	Yes	Yes	Yes	Yes	NA
Pectolytic Enzyme	Zimaflow	Yes	Yes	Yes	Yes	Yes	NA
Pectolytic Enzyme	Zimarom	Yes	Yes	Yes	Yes	Yes	NA
Pectolytic Enzyme	Zimaskin	Yes	Yes	Yes	Yes	Yes	NA
Pectolytic Enzyme	Zimafruit	Yes	Yes	Yes	Yes	Yes	NA
Tannin	Colorstab SG	Yes	Yes	Yes*	No	Yes	*For NOP, only in wines labelled as "made with organic grapes". Not permitted for Taiwan.
Tannin	Premium Limousin SG	Yes	Yes	Yes*	No	Yes	*For NOP, only in wines labelled as "made with organic grapes". Not permitted for Taiwan.
Tannin	Premium Tostato	Yes	Yes	Yes*	Νο	Yes	*For NOP, only in wines labelled as "made with organic grapes". Not permitted for Taiwan.
Tannin	Premium Vinnacciolo	Yes	Yes	Yes*	Νο	Yes	*For NOP, only in wines labelled as "made with organic grapes". Not permitted for Taiwan.
Tannin	Premium Uva SG	Yes	Yes	Yes*	No	Yes	*For NOP, only in wines labelled as "made with organic grapes". Not permitted for Taiwan.

Product Type	Product name	BioGro	MPI OOAP EU, UK, Swz MPI	MPI OOAPUSDA NOP	00AP Taiwan	COR	Restriction
Tannin	Premium Whisky Lattone SG	Yes	Yes	Yes*	No	Yes	*For NOP, only in wines labelled as "made with organic grapes". Not permitted for Taiwan.
Tannin	Safe Tan	Yes	Yes	Yes*	No	Yes	*For NOP, only in wines labelled as "made with organic grapes". Not permitted for Taiwan.
Tannin	V-Tan	Yes	Yes	Yes*	No	Yes	*For NOP, only in wines labelled as "made with organic grapes". Not permitted for Taiwan.
Tannin	Ti Premium SG	Yes	Yes	Yes*	No	No	*For NOP, only in wines labelled as "made with organic grapes". Not permitted for COR/Taiwan.
Yeast Nutrient	V-Activ Scorze, Easy Activ Hulls	Yes	Yes	Yes	Yes	Yes	ΝΑ
Yeast Nutrient	V-Malo Activ	Yes	Yes	Yes	Yes	Yes	NA
Yeast Nutrient	V Starter TF	Yes	Yes	Yes	Yes	Yes	NA
Yeast Nutrient	V Starter Arom	Yes	Yes	Yes	Yes	Yes	NA
Yeast Nutirent	X-Pro Verve	Yes	Yes	Yes	Yes	Yes	NA
Inactivated Yeast	X-Pro Protection	Yes	Yes	Yes	Yes	Yes	NA
Inactivated Yeast	X-Pro Identity White	Yes	Yes	Yes	Yes	Yes	NA
Inactivated Yeast	X-Pro Identity Red	Yes	Yes	Yes	Yes	Yes	NA
Inactivated Yeast	X-Pro Finesse	Yes	Yes	Yes	Yes	Yes	ΝΑ
Inactivated Yeast	X-Pro Grapes	Yes	Yes	Yes	Yes	Yes	ΝΑ
Yeast	Bayanus	Yes	Yes	Yes	No	No	Contains E491. For NOP: Only in wine labelled "Made with Organic grapes". Not permitted for Taiwan and COR
Yeast	Combo XT	Yes	Yes	Yes	No	No	Contains E491. For NOP: Only in wine labelled "Made with Organic grapes". Not permitted for Taiwan and COR
Yeast	Premium Blossom	Yes	Yes	Yes	No	No	Contains E491. For NOP: Only in wine labelled "Made with Organic grapes". Not permitted for Taiwan and COR

Product Type	Product name	BioGro	MPI OOAP EU, UK, Swz MPI	MPI OOAPUSDA NOP	00AP Taiwan	COR	Restriction
Yeast	Premium Chardonnay	Yes	Yes	Yes	No	No	Contains E491. For NOP: Only in wine labelled "Made with Organic grapes". Not permitted for Taiwan and COR
Yeast	Premium Fructo	Yes	Yes	Yes	No	No	Contains E491. For NOP: Only in wine labelled "Made with Organic grapes". Not permitted for Taiwan and COR
Yeast	Premium Rouge	Yes	Yes	Yes	No	No	Contains E491. For NOP: Only in wine labelled "Made with Organic grapes". Not permitted for Taiwan and COR
Yeast	Premium Tiol	Yes	Yes	Yes	No	No	Contains E491. For NOP: Only in wine labelled "Made with Organic grapes". Not permitted for Taiwan and COR

## Services





#### **Cloud Spec - Colour and Phenolics**

Cloudspec unlocks a new world of opportunity in colour and phenolics control. with the revolutionary ability to measure both clear and hazy samples, our winery integrated technology enables you to rapidly analyse, predict and control colour and phenolics at every stage of the winemaking process. Paired with powerful consumer preference tools, optimising your wine style has never been more possible.

## **ANALYTICAL SERVICES**

#### **Timing of Analysis**

Each winery's situation is different, these are just guidelines which must be adjusted to fit each winery situation, or you may do too many or too few tests, or at inappropriate times. For more specific recommendations, please ask us! Here are some suggestions for tests to be done at different times in a wine's life.

#### **Grapes/Juice**

- Brix
- pH
- Total acidity
- Ammonia/NOPA (YAN)
- Optional:
- Malic acid
- Potassium
- Calcium
- Total SO2 (top & bottom, to check mixing) especially when MLF is expected
- Microscopic exam for non-Saccharomyces yeast

#### Sluggish/Stuck Fermentation

- Alcohol
- Glucose/fructose
- Volatile acidity
- Micro exam
- Yeast viability
- Optional:
- Malic acid
- pH
- Sensory evaluation

#### **After Yeast Fermentation**

- Sensory evaluation
- Residual sugar
- Volatile acidity
- Total acidity
- pH
- Alcohol
- Total SO2 (free SO2 is bound up during ferment) especially when MLF is expected

## **ANALYTICAL SERVICES**

#### **After ML Fermentation**

- Sensory evaluation
- Malic acid
- Total acidity pH
- Acid addition trials if needed
- Total SO2 if none added after yeast fermentation (Free/Total SO2 if SO2 added after fermentation)

#### **During Cellaring**

- Free & Total SO2
- pH
- Total acidity if additions/reductions made Cold stability (white)
- Protein stability/bentonite trials (white) Malic acid (if needed)
- Sensory evaluation
- Volatile acidity
- Optional:
- Fining trials for improvement
- Sulphide detection/treatment trials
- Acid addition/reduction trials
- Micro exam/microbe culture if activity/film present
- Brettanomyces culture

#### **Before Bottling**

- pH if not tested recently
- Alcohol if barrel aged
- Residual sugar if not tested dry earlier
- Cold/heat stability if any blending done (white)
- Sensory evaluation
- Free & Total SO2
- Optional:
- Brettanomyces, Pediococcus culture (red intended to be bottled unfiltered)
- Adjustment trials if needed
- Fining trials if needed
- Sulphide detection/treatment trials

## **ANALYTICAL SERVICES**

#### After Bottling

• Bottle sterility check if sterile-filtered (membrane culture for yeast & bacteria) Free & Total SO2 (for post-bottling records

#### **During Bottle Aging**

- Sediment/haze identification if any forms
- Micro exam/culture if wine is active in the bottle
- Periodic sensory evaluation

* Bottle must be full and not on Ullage or if bottles previously opened.	TESTS
	PANELS
Basic Juice Panel	TA, Brix, pH (+ berry prep if required)
Expanded Juice Panel	TA, Brix, pH, Nitrogen, YAN (+berry prep if required)
Stuck Ferment Panel	Acetic acid, Alcohol, Glucose/Fructose, pH, Microscopic Exam, Yeast count/Viability
Basic Wine Chemistry *	Alcohol, TA, pH, Acetic acid, Malic, Total sugar (G/F), FSO <sub>2</sub> & TSO <sub>2</sub>
Basic Wine Chemistry + Micro*	Alcohol, TA, pH, Acetic acid, Malic, Total sugar (G/F), FSO <sub>2</sub> & TSO <sub>2</sub> , Direct culture (Wine in Cellar), Micro. Exam
Microbial Stability Panel	Acetic acid, Malic acid, Glucose/Fructose, pH, Direct Culture (Wine in Cellar), Microscopic Exam
Post-Bottling Panel *	pH, FSO <sub>2</sub> , TSO <sub>2</sub> , Membrane filtration culture (as required for white & red wines)
Wine Export Panel (EU)*	Alcohol, Total alcoholic strength, Total dry extract, TA, Acetic acid, Citric acid, TSO2, Total glucose/fructose
Wine Export Panel (EU+Japan)*	Alcohol, Total alcoholic strength, Total dry extract, TA, Acetic acid, Citric acid, TSO2, Total glucose/fructose, Sorbic

#### Pacific Rim Oenology Services (2017) Ltd

Postal address: P.O. Box 1132, Blenheim 7240 Physical address: 4 Bristol St., Riverlands, Blenheim 7274

> Telephone: (03) 577-9000 Cell Phone: 027 416-6497 Toll Free: 0800-80-5779 Email: <u>info@pros.co.nz</u> Website: <u>www.pros.co.nz</u>