



## PRODUCT CATALOGUE | VINTAGE 2022



Enlightened Science. Empowered Artistry.

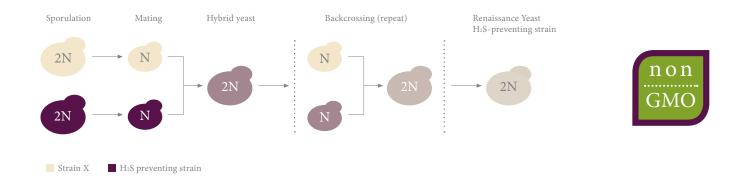


## H<sub>2</sub>S PREVENTION

Even in trace amounts that can't be easily detected by wine consumers,  $H_2S$  can still impair the true flavors of your wine

# Created by Selective Breeding

Renaissance yeast uses the science of selective breeding to create wine strains with superior attributes and technical performance. Our unique, non-GMO process enables us to isolate yeast strains with all-around performance in winemaking and outstanding flavors and aromas to truly make wines exceptional.



# Innovative H<sub>2</sub>S Prevention

 $H_2S$  is responsible for the distinctive smell of rotten eggs and is usually formed naturally by yeast during wine fermentations. Even in trace amounts, which may be difficult to detect by wine consumers, the presence of  $H_2S$  prevents the expression of the wine's full flavor, aroma and personality.

The trait to prevent  $H_2S$  during fermentation was discovered in a natural yeast from a vineyard in Emilia-Romagna, Italy, and it is this natural isolate that is used as a base for the selective breeding of Renaissance wine yeast strains.

NOTE: Hydrogen Sulfide can still be produced in the wine by other means. In order to completely prevent  $H_2S$  in your wine, it is necessary to carefully avoid the introduction of sulfide-containing chemical sprays prior to harvest, as well as co-inoculation by other yeast strains.



## SELECTIVE BREEDING

- Enhance sensory attributes
- Improved technical characteristics
- H<sub>2</sub>S-preventing trait

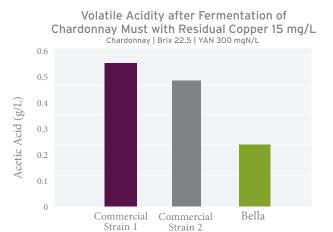
## TR-313 Other Non-H2S Producing Strain Grapefruit / Lemon / Lime Sulfur Off Flavors Pear / Apple 2.5 Apricot / Peach Butter / Diacetyl Vanilla Tropical Fruit Oak / Toas Black Pepper / Eucalyptus Boxwood / Black Currant Bud

# Innovative Traits by Selective Breeding

Renaissance Yeast knows that, in addition to controlling  $H_2S$ , a wine yeast has to be an allaround dependable performer with exceptional secondary qualities. With this in mind, we continually build upon the core  $H_2S$ -preventing platform to develop yeast with outstanding attributes that include:

BRAVO: High Glycerol Producing Yeast BELLA: Low Acetic Acid Production Yeast TR-313: Volatile Thiol Releasing Wine Yeast FRESCO: Cider Specific Yeast

These strains are useful tools not only for the  $H_2S$  prevention, but also to improve technical characteristics such as the need for enhanced mouthfeel (Bravo), management of challenging fermentation conditions (Bella), and exceptional volatile aroma production (TR-313).



#### Enhanced Sensory Attributes





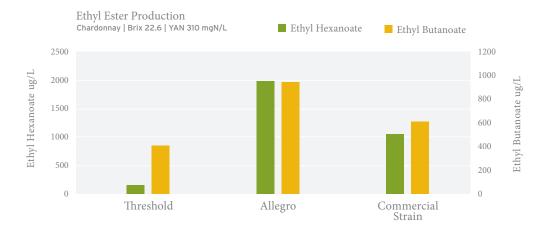
- Allegro is a fruit forward yeast strain
- Produces high amounts of esters
- Prevents formation of H<sub>2</sub>S and other volatile sulfur compounds (VSC's)
- Reveals pronounced aromas of peach, tropical fruits, pear, and white flowers
- MLF compatible
- Moderate nutrients requirement and extremely low production of SO<sub>2</sub>

An ester-producing yeast for aromatic modern white wines

Allegro pairs perfectly with moderate climate Chardonnay and Viognier, where peach and melon predominates, but it is also an ideal partner with more neutral varietals as Ugni Blanc, Colombard, Pinot Blanc, Chenin or high yielding vineyards. Because Allegro is H<sub>2</sub>S-preventing, it is the perfect ally for barrel aging on the lees.

#### **Recommended Varietals:**

- Chardonnay
- Viognier
- Ugni Blanc
- Colombard
- Pinot Blanc
- Chenin
- Semillon



#### Ester Aroma Descriptors:: Ethyl Hexanoate: fruity, flowery, pineapple, blackberry, apple, strawberry Ethyl Butanoate: papaya

### **TECHNICAL CHARACTERISTICS**

Kinetics	Moderate
Optimal Temperature	15 °C to 28 °C
Cold Tolerance*	13 °C
Alcohol Tolerance	16%
Nitrogen Requirements	Moderate
Killer Factor	Sensitive
Flocculation	High

Dosage	0.2-0.35 g/L	YAN Levels:
Conversion Factor**	16.3 g/L	Low 150-225
Glycerol	5.0-7.0 g/L	Moderate 225-300
Volatile Acidity	Low	High 300+
SO <sub>2</sub> Production	Very Low - None	
H <sub>2</sub> S Production***	Non-Detectable	
Foam Production	Low	

\* Once active fermentation has been established.

\*\* Grams of sugar required to produce 1% alcohol (v/v). Varies depending on the sugar and nutrients composition of the must and environmental conditions. \*\*\* below threshold of detection in conditions tested





- Viva is a general white vinification strain, and is also a popular choice for neutral seltzer fermentations
- Prevents formation of H<sub>2</sub>S
- A strong fermenter that will perform in a wide range of temperatures (14-28 °C)
- This strain reveals notes of pear, apple, grapefruit, lime and fresh pineapple, which will add a delicate complexity

Sensory Profile in Sauvignon Blanc

MLF compatible

A clean fermenting yeast for elegant, crisp, and lively white wines

Viva is recommended for cool climate Chardonnays (e.g. Chablis), where pear, green plum and apple notes are desired, as well as Australian and German Rieslings styles due to its citrusy (lime) characteristics. It can be a great pair for spicy Alsacian Pinot Gris or Italian Pinot Grigio as it also presents hints of black pepper, eucalyptus. Due to its H<sub>2</sub>S prevention and its MLF compatibility, it can be used perfectly in barrel fermentation of Sauvignon Blanc "Fume Blanc" style.

#### Recommended Varietals:

- Chardonnay
- Riesling
- Pinot Gris / Grigio
- Sauvignon Blanc

It is not recommended to use Viva for grapes recently treated with copper sulfate (or other fungicides) or musts contaminated by such compounds as its overall fermentation performance may be affected.

YAN Levels:

Т



Dosage

### TECHNICAL CHARACTERISTICS

Kinetics	Moderate
Optimal Temperature	14 °C to 28 °C
Cold Tolerance*	13 °C
Alcohol Tolerance	16%
Nitrogen Requirements	Moderate
Killer Factor	Active
Flocculation	High

Dobuge	0.12 0.000 8, 12	111111110	210:
Conversion Factor**	16.3 g/L	Low	150-225
Glycerol	6.0-7.5 g/L	Moderate	225-300
Volatile Acidity	Low	High	300+
SO <sub>2</sub> Production	Low		
H <sub>2</sub> S Production***	Non-Detectable		
Foam Production	Low		

0.2-0.35 g/L

\*\* Grams of sugar required to produce 1% alcohol (v/v). Varies depending on the sugar and nutrients composition of the must and environmental conditions. \*\*\* below threshold of detection in conditions tested

\* Once active fermentation has been established.

VIC-23 Sensory Attributes





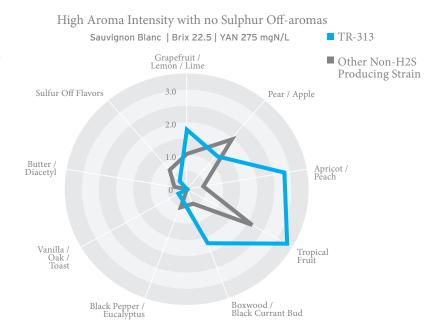
- TR-313 is an intensely aromatic strain
- Releases an exceptional amount of thiols and esters during fermentation
- TR-313 has the ability to reveal pronounced aromas of Passion fruit, Guava, Grapefruit, Gooseberry, and Blackcurrent
- TR-313 has the unique ability to reveal three volatile thiols: 4-mercapto-4-methylpentan-2-one (4MMP), 3-mercaptohexan-1-ol (3MH) and its acetate ester (3MHA)
- It is a reliable fermenter that produces above average glycerol for a white strain and has low to moderate nitrogen requirements

A thiol releasing strain with exeptional clean aromatic profile for varietal wines

TR-313 is specifically bred to enhance a wine's aromatic potential and is ideal for aromatic expression of varietals such as Sauvignon Blanc, Riesling, Chenin Blanc, Semillon, Sylvaner, Pinot Blanc, Columbard, Grüner Veltliner, and Pinot Noir.

### Recommended Varietals:

- Sauvignon Blanc
- Riesling
- Chenin Blanc
- Semillon
- Pinot Noir



### **TECHNICAL CHARACTERISTICS**

Kinetics	Moderate to Fast
Optimal Temperature	14 °C to 25 °C
Cold Tolerance*	13 °C
Alcohol Tolerance	16% vol
Nitrogen Requirements	Low - Moderate
Killer Factor	Active
Flocculation	High

I	Dosage	0.2-0.35 g/L	YAN Levels:
	Conversion Factor**	16.3 g/L	Low 150-225
	Glycerol	7.0-8.5 g/L	Moderate 225-300
	Volatile Acidity	Low	High 300+
	SO <sub>2</sub> Production	Low - Moderate	0
	H <sub>2</sub> S Production***	Non-Detectable	
	Foam Production	Low	

\*\* Grams of sugar required to produce 1% alcohol (v/v). Varies depending on the sugar and nutrients composition of the must and environmental conditions. \*\*\* below threshold of detection in conditions tested

\* Once active fermentation has been established.





- Bella is a stress tolerant general white vinification strain
- Elegant and aromatic profile featuring tropical fruits and floral citrus characteristics
- Versatile strain performs well in a wide range of temperatures and conditions
- Produces very low volatile acidity and H<sub>2</sub>S even during stressful fermentation conditions including high copper residues in the must
- Suitable for bottle conditioning and sparkling wine production

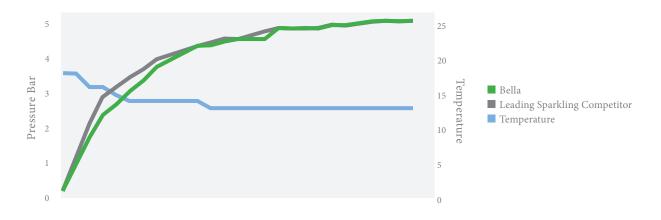
A versatile and robust general white strain for elegant wines

Bella is ideally suited for white wine vinifications but also has the ability to perform well in red wines. Bella's aromatic profile suits varietals such as Muscat, Riesling, Gewürztraminer, warmer climate Chardonnay, Semillon, Glera and it can also perform well in secondary fermentations in the bottle.

#### Recommended Varietals:

- Muscat
- Riesling
- Gewürtztraminer
- Chardonnay
- Semillon
- Glera

Sparkling Production - Secondary Fermentation Traditional Method | Alc 10.6 % vol. | Sugar 22.9g/L | YAN 72 mgN/L



### **TECHNICAL CHARACTERISTICS**

Kinetics	Moderate	Dosage	0.2-0.35 g/L	YAN Lev	vels:
Optimal Temperature	14 °C to 30 °C	Conversion Factor**	16.4 g/L	Low	150-225
Cold Tolerance*	13 °C	Glycerol	6.0-8.0 g/L	Moderat	e 225-300
Alcohol Tolerance	17% vol	Volatile Acidity	Very Low	High	300+
Nitrogen Requirements	High	SO <sub>2</sub> Production	None to Very Little		
Killer Factor	Neutral	H <sub>2</sub> S Production***	None to Very Little		
Flocculation	High	Foam Production	Low		

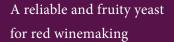
\* Once active fermentation has been established.

### \*\* Grams of sugar required to produce 1% alcohol (v/v). Varies depending on the sugar and nutrients composition of the must and environmental conditions. \*\*\* below threshold of detection in conditions tested





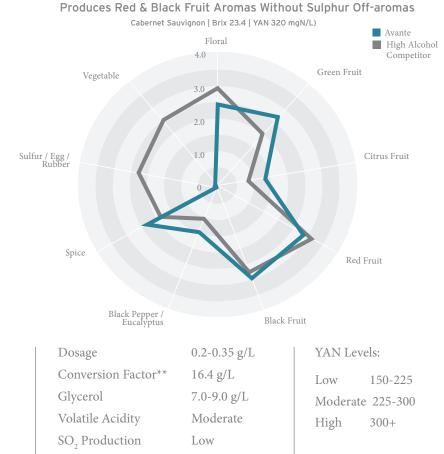
- Avante is a versatile red vinification strain
- Tolerates up to 17% alcohol
- Prevents the formation of H<sub>2</sub>S
- Produces a red fruit overture with good color stability across all red varietals
- Consumes around 25-30% of malic acid present during the alcoholic fermentation
- Avante maintains desired varietal characteristics while producing aromas and flavours of raspberry, strawberry, and red plum



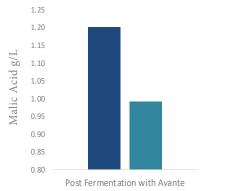
Avante is ideally suited for wines that have higher alcohol levels, such as full bodied Shiraz or Zinfandel. Given its red fruit notes, the strain also has outstanding aromatic compatibility for moderate climate Cabernet Sauvignon and Sangiovese.

#### Recommended Varietals:

- Shiraz
- Zinfandel
- Cabernet Sauvignon
- Sangiovese



Malic Acid Consumption Pinot noir | Brix 24.6 | YAN 268 mgN/L



### TECHNICAL CHARACTERISTICS

Kinetics	Moderate to Fast
Optimal Temperature	18 °C to 35 °C
Cold Tolerance*	15 °C
Alcohol Tolerance	17% vol
Nitrogen Requirements	Low - Moderate
Killer Factor	Neutral
Flocculation	High

 $^{**}$  Grams of sugar required to produce 1% alcohol (v/v). Varies depending on the sugar and nutrients composition of the must and environmental conditions.

Non-Detectable

Low

\*\*\* below threshold of detection in conditions tested

H<sub>2</sub>S Production\*\*\*

Foam Production

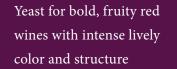
\* Once active fermentation has been established.





- Moderate fermentation speed for optimum color extraction
- Prevents the formation of H<sub>2</sub>S
- Promotes polyphenolic extraction
- Maintains the natural acidity of the juice
- MLF Promoting (Low TSO2 & Malic Acid Preservation)

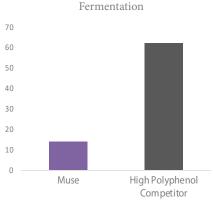
Production of TSO<sub>2</sub>(ppm) During



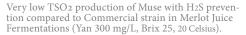
Muse pairs perfectly with full bodied international style Merlot as its aromatic profile is based on concentrated black fruit (blackberry, plum). This yeast is ideal for grapes such as Tempranillo, as Muse will add intensity to its aromatic profile.

#### Recommended Varietals:

- Merlot
- Tempranillo
- Petit Syrah
- Shiraz







### **TECHNICAL CHARACTERISTICS**

Kinetics	Moderate
Optimal Temperature	18 °C to 25 °C
Cold Tolerance*	15 °C
Alcohol Tolerance	16% vol
Nitrogen Requirements	Moderate - High
Killer Factor	Neutral
Flocculation	High

2.0 1.8 1.6 1.4 1.2 1.0 0.8 0.6 0.4 0.2 0.0 Pre-fermentation Post-fermentation

Malic acid (g/L) Preservation During

Fermentation

Muse preserves the natural acidity of musts. Merlot Juice Fermentations (Yan 300 mg/L, Brix 25, 20 Celsius).

Dosage	0.2-0.35 g/L	YAN Levels:
Conversion Factor**	16.6 g/L	Low 150-225
Glycerol	7.0-9.0 g/L	Moderate 225-300
Volatile Acidity	Moderate	High 300+
SO <sub>2</sub> Production	Very Low	C
H <sub>2</sub> S Production***	Non-Detectable	
Foam Production	Moderate	

\*\* Grams of sugar required to produce 1% alcohol (v/v). Varies depending on the sugar and nutrients composition of the must and environmental conditions.

\*\*\* below threshold of detection in conditions tested

\* Once active fermentation has been established.

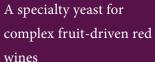




- High ester producing strain with low acetic acid and TSO<sub>2</sub>
- Prevents the formation of H<sub>2</sub>S

Brio

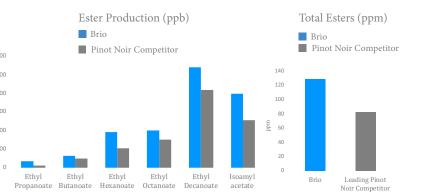
- Brio elevates the aromatic expressiveness of a wine with impressive notes of cherry, black fruit and spice
- Brio improves the extraction of phenolic compounds and colour, which helps to produce a complex, rounded wine



Brio is noted for its ability to enhance the flavor of red wine varietals, particularly Pinot Noir, Grenache and youthful Gamays. With its intense aromatics and ability to aid color and extraction, Brio is also well-suited for early release red and rosé wines.

#### Recommended Varietals:

- Pinot Noir
- Gamay Nouveau
- Grenache
- Carmenere
- Syrah
- Petit Verdot



Ethyl and acetate esters produced during fermentation of Pinot Noir, with Brio and a leading "Pinot Noir" competitor. Brix: 24.6, YAN: 272 mg N/L, and final RS: <1.0%

> Aromatic Descriptors Ethyl Propanoate: Fruity, cherries Ethyl Butanoate: Pineapple, Strawberries Ethyl Hexanoate: Green apples, Strawberries, Pineapples, Blackberries Ethyl Decanoate: Floral, Fruity, Soap Isoamyl Acetate: Banana, Fruity

Dosage	0.2-0.35 g/L	YAN Leve	els:
Conversion Factor**	16.5 g/L	Low	150-225
Glycerol	6.0-8.0 g/L	Moderate	225-300
Volatile Acidity	Low	High	300+
SO <sub>2</sub> Production	Moderate	-	

Non-Detectable

## TECHNICAL CHARACTERISTICS

Kinetics	Moderate - Fast
Optimal Temperature	17 °C to 28 °C
Cold Tolerance*	16 °C
Alcohol Tolerance	16% vol
Nitrogen Requirements	Moderate
Killer Factor	Active
Flocculation	High

 $^{\ast}$  Once active fermentation has been established.

\*\* Grams of sugar required to produce 1% alcohol (v/v). Varies depending on the sugar and nutrients composition of the must and environmental conditions. \*\*\* below threshold of detection in conditions tested

Low

H<sub>2</sub>S Production\*\*\*

Foam Production



Pinot Noir Competitor







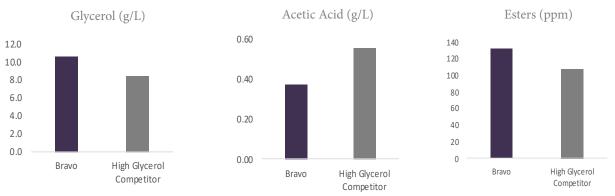
- High glycerol producing strain
- Prevents the formation of H<sub>2</sub>S
- High alcohol tolerance and robust fermentation characteristics
- Produces high levels of esters
- Sensory profile is characterized by red fruit (strawberries, cherries) and rich dark fruit (plum and prunes)
- Lower VA when compared to other leading high glycerol strains
- MLF compatible
- Suitable for a wide range of temperatures

### A full body red wine strain

Bravo is recommended for enhancing smoothness and mouthfeel. It adds aromatic complexity for long ageing wines where post fermentative extraction is important. For youthful red wines, where fruit preservation is key, glycerol will play an important palate-balancing role. The strain is recommended for Nebbiolo, Bordeaux style Cabernet Sauvignon, Malbec, Carmenere, cool climate Syrah and Petit Verdot.

#### Recommended Varietals:

- Nebbiolo
- Cabernet Sauvignon
- Malbec
- Carmenere
- Syrah
- Petit Verdot



Fermentation of Cabernet Sauvignon | YAN 320.6 | 25 BRIX | 21°C

Bravo produces a high amount of glycerol and esters while also producing low volatile acidity when compared to a high glycerol competitor.

### TECHNICAL CHARACTERISTICS

Kinetics	Moderate to Fast	Dosage	0.2-0.35 g/L	YAN Levels:
Optimal Temperature	16 °C to 30 °C	Conversion Factor**	16.8 g/L	Low 150-225
Cold Tolerance*	13 °C	Glycerol	9.0-11.0 g/L	Moderate 225-300
Alcohol Tolerance	17% vol	Volatile Acidity	Low	High 300+
Nitrogen Requirements	Moderate	SO <sub>2</sub> Production	Very Low	C
Killer Factor	Neutral	H <sub>2</sub> S Production***	Non-Detectable	
Flocculation	High	Foam Production	Moderate	

\* Once active fermentation has been established.

\*\* Grams of sugar required to produce 1% alcohol (v/v). Varies depending on the sugar and nutrients composition of the must and environmental conditions. \*\*\* below threshold of detection in conditions tested



# Organic

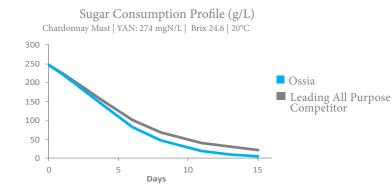


- High performance & versatile
- Certified organic
- Prevents the formation of H<sub>2</sub>S
- Produces aromas of tropical fruit esters
- Maintains the natural acidity in juice
- Suitable for bottle conditioning

A robust and versatile organic yeast for making complex, aromatic beverages

Ossia is a very versatile strain and is recommended for use in white, red, and fruit wines and cider. Ossia's aroma profile and its ability to arrest fermentation by lowering the temperature also make it a good choice for off-dry styles of wine.

Notes: When fermenting to dryness, it is recommended to increase temperature to > 18 °C near the end to ensure a proper finish. Nitrogen supplementation is recommended during the initial 1/3 of fermentation, especially when fermenting at warmer temperatures or in highly clarified musts.



#### Recommended Styles:

- White Wine
- Red Wine
- Fruit Wine
- Cider

It is not recommended to use Ossia for grapes recently treated with copper sulfate (or other fungicides) or musts contaminated by such compounds as its overall fermentation performance may be affected.



DE-ÖKO-003 EU Agriculture

#### **TECHNICAL CHARACTERISTICS**

Kinetics	Moderate	Dosage	0.2-0.35 g/L	YAN Levels:
Optimal Temperature	18 °C to 32 °C	Conversion Factor**	16.5 g/L	Low 150-225
Cold Tolerance*	15 °C	Glycerol	6.0-8.0 g/L	Moderate 225-300
Alcohol Tolerance	16% vol	Volatile Acidity	Low	High 300+
Nitrogen Requirements	Moderate	$SO_2$ Production	None - Very Low	
Killer Factor	Active	H <sub>2</sub> S Production***	Non-Detectable	
Flocculation	Moderate - High	Foam Production	Low	

\* Once active fermentation has been established.

\*\* Grams of sugar required to produce 1% alcohol (v/v). Varies depending on the sugar and nutrients composition of the must and environmental conditions. \*\*\* below threshold of detection in conditions tested



# Cider

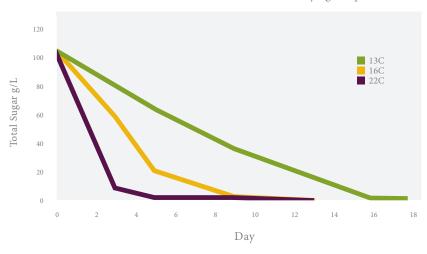


- Specifically developed for cider producers
- Prevents the formation of H<sub>2</sub>S
- Imparts a bright apple character and refreshing crisp finish
- Moderate steady kinetics
- Medium-bodied & dry fermenting

Fresco produces notable aromas and flavours of red apple, pear and citrus. It can be used for different styles of Cider as New World, English, French, Perry, Ice, New England, Apple Wine and fruit ciders.

### **Recommended Styles:**

- New World
- English
- French
- Perry
- Ice
- New England
- Apple Wine
- Fruit Cider



#### Fresco: 6.5% ABV Cider Fermentation With Varying Temperatures

### **TECHNICAL CHARACTERISTICS**

MLF Compatible	Yes	Dosage	0.2-0.35 g/L	YAN Levels:
Optimal Temperature	13 °C to 25 °C	SO <sub>2</sub> Production	Low	Low 150
Cold Tolerance*	13 °C	H <sub>2</sub> S Production**	Non-Detectable	Moderate 225
Alcohol Tolerance	15% vol	Flocculation	High	High 300
Nitrogen Requirements	Moderate	Killer Factor	Neutral	0

150-225 te 225-300 300+

\* Once active fermentation has been established.

\*\* below threshold of detection in conditions tested



YEAST COMPARISON

## H<sub>2</sub>S PREVENTION

Even in trace amounts that can't be detected by smell,  $H_2S$  can still impair the true flavors of your wine

### YEAST PAIRINGS

White	Chardonnay	Sauvignon Blanc	Viognier	Riesling	Pinot Gris	Muscat	Semillon	Secondary Fermentation	Cool Climate	Warm Climate	High Yielding
Allegro											
Viva											
TR-313											
Bella											
Ossia											
Red	Merlot	Cabernet Sauvignon	Syrah	Grenache	Pinot Noir	Sangiovese	Tempranillo	Secondary Fermentation	Cool Climate	Warm Climate	High Yielding
Red	Merlot		Syrah	Grenache	Pinot Noir	Sangiovese	Tempranillo				
	Merlot		Syrah	Grenache	Pinot Noir	Sangiovese	Tempranillo				
Avante	Merlot		Syrah	Grenache	Pinot Noir	Sangiovese	Tempranillo				
Avante Muse	Merlot		Syrah	Grenache	Pinot Noir	Sangiovese	Tempranillo				

Wine Style: W = White, R = Red , Ré = Rosé, S = Secondary Fermentation & Sparkling, F = Fruit Wine, C = Cider Kill Factor: K = Killer Positive, N = Neutral, S = Killer Sensitive

	Kinetics	Nitrogen Requirements	Cold Tolerance	Alcohol Tolerance	Flocculation	Glycerol	VA	TSO2	Foam	Killer Factor	Esters	Wine Style
Allegro										S		W/Ré/S
Viva										К		W/Ré
TR-313										К		W/Ré
Bella										Ν		W/S
Avante										Ν		R/W
Muse										Ν		R/Ré
Brio										К		R/Ré
Bravo										Ν		R/Ré
Ossia										К		W/R/F/S/C
Fresco										Ν		С



Winemakers who use our yeasts have remarked:

"My wine has never had such a remarkable aroma"



## REHYDRATION PROTOCOL

Correct yeast rehydration is crucial to obtain a healthy fermentation

### Please follow the Rehydration Instructions to avoid stuck or sluggish fermentations

#### Inoculation Rate:

0.2-0.35 g/L (1.7-2.9 lbs/1000 gallons)

#### Rehydration Instructions:

- 1. In an inert and sterile container, prepare chlorine-free water at 38-42 °C (100-108 °F) that is 10 times the weight of the yeast to be rehydrated.
- 2. Gently mix the yeast into the water and allow 20 minutes for rehydration.
- 3. After rehydration, begin to slowly add full strength juice into the yeast mixture every 5 minutes to allow for acclimation. Do not decrease the temperature of the mixture by more than 5 °C (9 °F) with each juice addition.
- 4. When the temperature of the yeast suspension is less than 10 °C (18 °F) warmer than the must or juice to be inoculated, slowly add the yeast mixture into the fermentation vessel.

#### Note

Directly adding dry yeast to the must or juice tank is not advised.

#### Restart of Stuck or Sluggish Fermentations Protocol

- Prepare the Pied de Cuve—The volume prepared should be 2-5 % of the volume of the stuck wine. This will contain water, grape juice and stuck wine (not more than half of the total volume). The sugar content should be around 5° Brix. Nutrients should be added and the temperature before the incorporation of the yeast should be at 24–26 °C.
- 2. Rehydration of the yeast—Use a different strain from the one that has been used in the first inoculation, preferably a fructophilic yeast that is resistant to alcohol (Avante and/or Bravo for reds and Bella for whites or reds). Follow instructions to prepare the mixture of water and yeast accordingly (steps 1 and 2 of the above Rehydration Instructions).
- 3. Add the yeast to the Pied de Cuve—Follow steps 3 and 4 of the Rehydration Instructions, adding the yeast to the Pied de Cuve instead when the protocol refers to "full strength juice" and "fermentation vessel".
- 4. Once the yeast is incorporated in the Pied de Cuve monitor the Brix with a hydrometer. When the Brix have dropped by half (2.5 Brix), it is ready to be incorporated into the stuck wine. The incorporation is done by adding an equal volume of stuck wine to the volume of the Pied de Cuve. Ensure that the temperature difference between the Pied de Cuve and the stuck wine does not exceed 10 °C. Keep the temperature of the fermentation between 18-23 °C. After each addition wait for the fermentation to show some activity and

then double the volume again. Continue this procedure until all of the stuck wine is transferred to the Pied de Cuve vessel.

#### Note

The inoculation rate and the use of  $SO_2$ , yeast hulls, rehydration nutrients, lysozyme should be decided according to the judgement of the winemaker.



## Enlightened Science. Empowered Artistry.

## Drop us a line (for USA and Canada only)

sales@gusmerenterprises.com

Gusmer Enterprise Inc. 81 M St | Fresno CA 93721 Phone: +(559) 485 2692 Fax: +(559) 485 4254



To the fullest extent not prohibited by applicable law, the products, materials, contents and information included on or otherwise made available in this yeast pack or data sheet (collectively, the "Contents") are provided on an "AS IS", "AS AVAILABLE" and "WITH ALL FAULTS" basis. Renaissance disclaims all representation and warranties of any kind in connection with the Contents and nothing provided shall be considered as an expressed or implied guarantee or as a condition of sale. All applications of the Contents should be adapted to the local conditions and the user accepts full responsibility.