Inspiring innovation.

NEW ENARTIS INNOVATIONS FOR HARVEST 2022

The Easytech selection of yeast nutrients and direct inoculation yeasts, including two new yeasts with extraordinary characteristics in the EnartisFerm Q line, are the main Enartis innovations for harvest 2022.

Easytech
CERTIFIED BY ENARTIS

Nutrients and Yeast Strains for Direct Inoculation

Easytech is a selection of yeasts and yeast nutrients that offer simple preparation methods making winery operations easier, with minimal resources needed to adequately use them, including energy, water and labor.

Easytech yeasts have been selected for their intrinsic characteristics, and unique production process, which makes them suitable for direct inoculation (Figure 1), without requiring rehydration to ensure optimal fermentation performance:

- **EnartisFerm Aroma White** is a reliable and strong fermenter for white and rosé wine production. Due to its ability of producing esters and releasing thiols, it is a very versatile strain capable of producing excellent wines from many different varieties.
- **EnartisFerm WS**, isolated 30 years ago from a late harvest Zinfandel at Williams Selyem Winery in Sonoma, this strain is known for its ability to completely ferment high ° Brix grapes in low nutrient conditions. It contributes exceptional complexity and structure with soft tannin extraction while respecting varietal and terroir characters and boosting fruit and spice expression.
- **EnartisFerm Vintage Red** is a strain selected for producing red wines destined for medium to long-term ageing. A steady fermenter with high alcohol tolerance, it enhances grapes' fruity and spicy notes, produces a significant amount of glycerol and mannoproteins, and helps color stabilization and malolactic fermentation onset.
- **EnartisFerm Q ET** (for Easytech) is a multipurpose strain, respectful of varietal characteristics, a good fermenter over a wide temperature range that is well suited for fermentation of quality white, red and rosé wines.

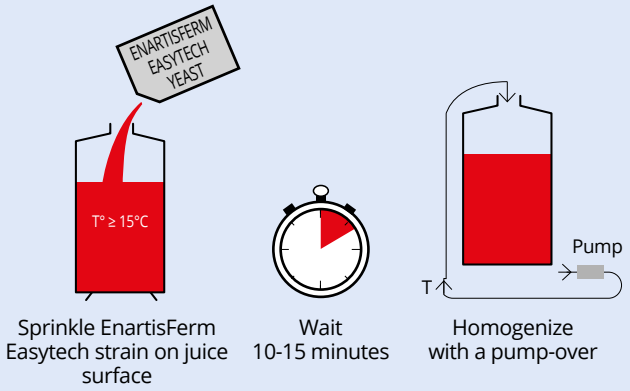

Figure 1: How to use EnartisFerm Easytech yeast

Easytech also includes two granulated and one liquid nutrient to be used at yeast inoculation. Easytech nutrients can be dissolved directly in must, do not form clumps and are easier and safer to use.

- **Nutriferm Arom Plus** is comprised of autolyzed yeast with an elevated content of branched-chain free amino acids that yeast can use to produce esters and other aromatic compounds. It significantly increases the aromatic intensity and complexity of wine.
- **Nutriferm Ultra** is a new nutrient rich in readily available amino acids, sterols, fatty acids, vitamins and microelements. It was developed to improve the survival rate of cells at inoculation and consequently to promote regular fermentations.
- **Nutriferm Ultra L** is an organic nutrient in liquid form created for application with automatic dosage systems. Just like its granulated counterpart, **Nutriferm Ultra L** provides a regular and complete fermentation which leads to the production of wines that are without defects and express the varietal characteristics of grapes.

ENARTISFERM Q TAU FD

EnartisFerm Q TAU FD is a freeze-dried strain of *Torulaspora delbrueckii* selected by the Polytechnic University of Marche (DiSVA Department).

Unlike the majority of *Torulaspora delbrueckii* strains available on the market, **EnartisFerm Q TAU FD** has a high alcohol tolerance that allows it to be used as the sole yeast in the fermentation of must with a potential alcohol content of up to 12-12.5%. With its good fermentation strength, it ferments at a speed comparable to that of *Saccharomyces cerevisiae*.

On a sensory level (Figure 2), **EnartisFerm Q TAU FD** enhances varietal fruity expression because of the production of ethyl esters and acetates and the release of terpenes. Above all, wines fermented with this strain impress due to their fullness, smoothness and sweetness because of the production of a large quantity of mannoproteins and polyalcohols.

EnartisFerm Q TAU FD can be used in the vinification of any kind of wine, including late harvest wines and it is certainly recommended in the production of whites, rosés and base wines for sparkling.

Sensory impact of EnartisFerm Q Tau FD

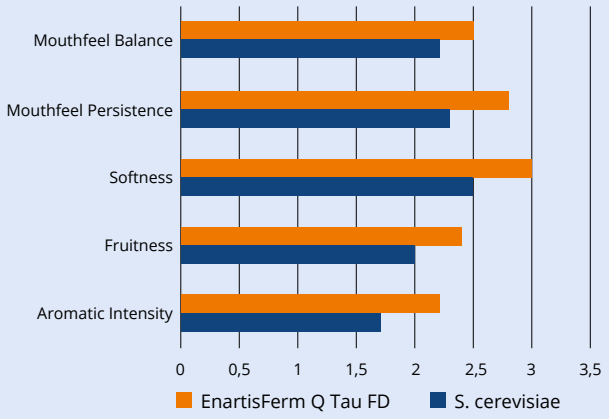

Figure 2: EnartisFerm Q Tau FD increases fruit intensity and softness/volume on the palate. Fermentation example as the sole yeast in Pinot Grigio juice.

ENARTISFERM Q RHO

Isolated from dried grapes intended to produce Amarone, **EnartisFerm Q RHO** is a strain belonging to the *Saccharomyces uvarum* species which possesses all the microbiological and enological characteristics typical of its species (Table1):

- Low temperature tolerance. At temperatures close to 10°C (50°F), it displays fermentative strength superior to *Saccharomyces cerevisiae*.
- Low production of volatile acidity, typically lower than 0.2 g/L in wines with alcohol content equal to 13-13.5%.
- High production of glycerol.
- Tendency to produce succinic acid and malic acid, increasing overall acidity.
- Lower sugar/alcohol yield compared to *Saccharomyces cerevisiae* yeasts.
- High production of 2-phenyl ethanol, a higher alcohol with an intense floral aroma.

Due to its propensity for a low sugar/alcohol yield and increase total acidity, **EnartisFerm Q RHO** helps to limit the "enological" effects of climate change. For instance, as the sole fermenting yeast, **EnartisFerm Q RHO** produces wines for use in blends to add acidity (Table 2).

Also interesting is its application in co-inoculation with *Saccharomyces cerevisiae* strains. When it helps preserve acidity and increase olfactory complexity by adding floral aromas to the thiol and fruity notes produced by the cerevisiae.

In red wine making, the combination with **EnartisFerm ES454** leads to the production of wines extremely rich in glycerol and mannoproteins which are soft and full at the palate, whereas the co-inoculation with **EnartisFerm ES488** results in higher intensity and greater aromatic complexity.

	Saccharomyces cerevisiae	*Saccharomyces uvarum*
Fermentation Temperature	12-36°C	8-30°C
2-phenylethanol* (mg/L)	10 -100	100 - 400
Glycerol* (g/L)	4 - 7	7 - 11
Acetic Acid* (g/L)	0,1 – 0,9	0,05 – 0,1
Succinic Acid* (g/L)	0,3 - 0,6	0,6 – 1,3
Malic Acid	1-30% Degradation	1 – 50% Production

*Range in a wine with 10% alcohol

Table 1: Main microbiological and enological characteristics that differentiate Saccharamyces uvarum from Saccharomyces cerevisiae.

	EnartisFerm WS	EnartisFerm Q RHO
pH	3,71	3,43
Alcohol %	13,30	12,86
Residual Sugar (g/L)	0,1	0,2
Glycerol (g/L)	9,1	11,4
Volatile Acidity (g/L)	0,68	0,20
Total Acidity (g/L)	5,8	10,6
Succinic Acid (g/L)	1,3	1,8
Malic Acid (g/L)	< 0,1	3,4
2-phenylethanol (mg/L)	159	440

Table 2: Analytical data comparison after the end of alcoholic fermentation of Cabernet Sauvignon juice (initial 24° Brix).

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