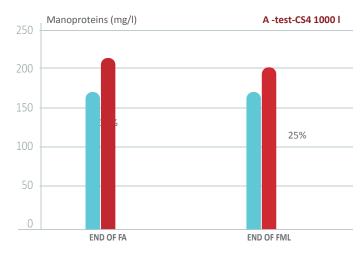
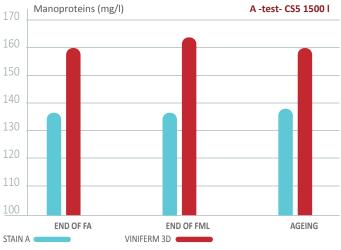




Long-lasting and well-rounded red wines with a sensation of volume in the mouthfeel.





Mannoprotein release (mg/l) in the fermentation and post-fermentation phases. Comparison of yeast strains. 2013-vintage Cabernet Sauvignon. A) - test CS4 1,000 l B) - test CS5 1,500 hl

Mannoprotein analysis was performed by isolating the wines' macromolecular fraction and then carrying out hydrolysis and analysis using HPLC, as per Quirós et al (2012). The samples were analysed twice.

CHARACTERISTICS

Viniferm 3D, specially designed for Mediterranean wines, develops the aromatic and taste characteristics of premium-quality black grapes. It intensifies aftertaste and gives the wine greater presence and volume, highlighting the phenolic fraction, smoothening astringency and emphasizing sweet tannins.

ORIGIN

Saccharomyces cerevisiae var. cerevisiae. Strain developed under the CENIT DEMETER programme between Bodegas Torres S.A. and the IFI (Instituto de Fermentaciones Industriales) and ICVV (Instituto de Ciencia de la Vid y el Vino) at Spain's CSIC to develop winegrowing and winemaking strategies and methods in response to climate change.



APPLICATIONS

It is ideal for producing premium quality wine from black grape varieties like Cabernet-Sauvignon, Merlot, Tempranillo and Monastrell.

ORGANOLEPTIC QUALITIES

Wines made from ripe grapes with a high ethanol content and a strong phenol presence lack sufficient structure to prevent the sensation of heat in the mouthfeel and dry or bitter notes in the taste profile.

Viniferm 3D produces significant amounts of mannoproteins during the fermentation and post-fermentation phases, enhancing the sensations of volume, roundness and length in the mouthfeel.

It intensifies aftertaste and gives the wine greater presence and volume, highlighting the phenolic fraction, smoothening astringency and emphasizing sweet tannins.

		Competitive factor	Usage temperature	Alcohol production	Ethanol tolerance % vol.	Nutrient requirement	Sensory impact	
Red	Vintage				70 VOI.			
++	+++	Neutral	18-28°C	Average	15	High	Varietal	

OENOLOGICAL PROPERTIES

- Short latency period.
- •Fermentation speed: rapid and regular.
- •Low volatile-acidity production.
- Nutrient requirement: high. Assimilable nitrogen correction is recommended, especially in musts made from over-ripe grapes with high potential alcoholic strength.
- •Usage temperature: 18-28°C.
- Ethanol resistance 14-15%vol.
- Mid-level alcohol production.
- •SH2 production: low.
- Produces little secondary fermentation.
- Excellent autolytic capacity (polysaccharide and mannoprotein release).

DOSAGE

Vinification 20-30 g/hl

INSTRUCTIONS FOR USE

To achieve the best results, it is essential to ensure comprehensive yeast strain implantation in the solution. It is therefore important to:

- Ensure proper hygiene in the winery.
- •Add the yeast as soon as possible.
- •Only add the prescribed dose.
- •Thoroughly rehydrate the yeast.

Rehydration:

- 1. Add the dry yeast to 10 times its weight in water (i.e. 10 litres of water to 1 kg of yeast), which should be at a temperature of 35–40 $^{\circ}$ C.
- 2. Wait 10 minutes.
- 3. Stir the mixture.
- 4. Wait another 10 minutes, then add to the grape must, ensuring that the temperature difference between the rehydrated yeast solution and the grape must does not exceed 10 $^{\circ}$ C.

Precautions for use:

- •Do not allow the yeast to rehydrate for more than 30 minutes without sugar.
- •Strictly following the timing, temperature and usage instructions will ensure maximum hydrated yeast viability.

MICROBIOLOGICAL AND PHYSICO-CHEMICAL PROPERTIES EP 879 (REV.1)

Yeast count (Saccharomyces spp.) [CFU /g]	> 1010
Other yeasts [CFU /g]	< 105
Moulds [CFU /g]	< 10 ³
Lactic bacteria [CFU /g]	< 10 ⁵
Acetic bacteria [CFU /g]	< 104
Salmonella [CFU /25 g]	Absent
E. coli [CFU /g]	Absent
Staphylococcus aureus [CFU g]	Absent
Total coliforms [CFU g]	< 10 ²
Moisture [%]	< 8
Pb [mg/kg]	< 2
Hg [mg/kg]	< 1
As [mg/kg]	< 3
Cd [mg/kg]	< 1

PHYSICAL APPEARANCE

Dust-free, tawny-coloured granules.

PACKAGING

500-g vacuum-sealed, multi-layer aluminium foil packets, supplied in 10-kg boxes.

STORAGE

When stored in its vacuum-sealed packet under refrigerated conditions (4–10 $^{\circ}$ C), the product will retain its properties for four years.

Prolonged exposure to temperatures above 35 °C and/or moisture will reduce its effectiveness.

RGSEAA: 31.00391/CR

This product complies with the International Oenological Codex and EC Regulation (UE) 2019/934.