

viniferm NS-TD

Non-*Saccharomyces* yeast.
Enhances aroma and creates structured mouthfeel

CHARACTERISTICS

Viniferm NS TD is a *Torulaspora delbrueckii* strain selected for its ability to improve wines' sensory properties..

Nose: Increases wine's complexity and aromatic spectrum. Intensifies floral notes by producing β -phenyl ethanol (rose and white flowers) while its powerful β -lyase activity (grapefruit and boxwood) boosts varietal characteristics.

Mouthfeel: Releases significant amounts of mannoproteins, adding roundness and volume to the wine.

ORIGIN

Torulaspora delbrueckii. Agrovín collection.

Yeast strain origin: D.O. Ribera del Duero



Research team: Microbiology Department III. UCM (Universidad Complutense de Madrid).

References:

» *Dynamic analysis of physiological properties of Torulaspora delbrueckii in wine fermentations and its incidence on wine quality (Belda et al. 2015 Applied Microbiology and Biotechnology)*

» *Actividades enzimáticas de levaduras no Saccharomyces para su aplicación enológica (Belda et al. 2015 ACE Enologia)*

» *Directed metabolomic approaches for the characterization and development of new yeast strains. (Belda et al. 2015 BIO Web of Conferences OIV2015)*

ORGANOLEPTIC QUALITIES

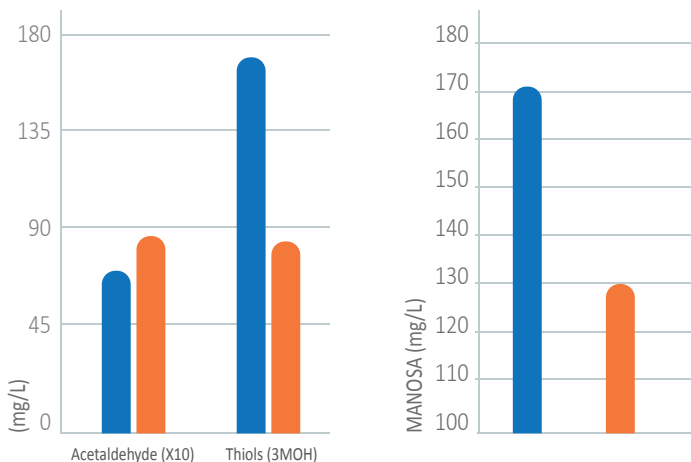
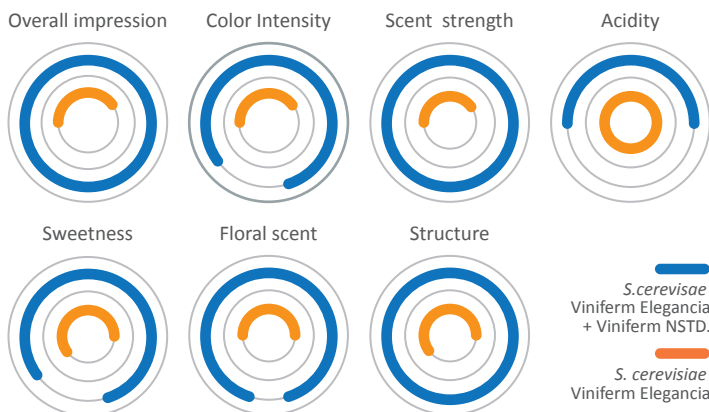
Increases wines' aromatics. Intensifies varietal qualities. Strongly accentuates wine taste, giving it a silky, full-bodied mouthfeel while reducing astringency and prolonging aftertaste.

APLICACION

» Varietal white and red wines in which producers seek to accentuate mouthfeel.

» Controlled fermentation of neutral varietals in which producers seek to enhance aromatic complexity.

» Production of flowery rosé wines with a full-bodied mouthfeel.



Characterisation of flavor profile and sensorial analysis

Production of mannoprotein

S. cerevisiae Viniferm Elegancia + Viniferm NSTD.

S. cerevisiae Viniferm Elegancia

OENOLOGICAL PROPERTIES

- » Alcohol production: 9.5% vol. *Saccharomyces cerevisiae* strain requires inoculation.
- » Usage temperature: 17–28 °C.
- » YAN requirement: high.
- » Hydrogen sulphide production: nil.
- » Volatile acidity production: very low.
- » Carbonyl compound (acetaldehyde and acetoin) production: very low.
- » Fermentation kinetics: average.
- » Sulphur dioxide resistance: low.
- » Non-*Saccharomyces* + *Saccharomyces cerevisiae* fermentation produces wines of lower alcoholic strength.

Viniferm NSTD: Winner of the Enomaq 2015 Innovation Award.

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 °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 °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.
- Work protocol: see attached data sheet.

MICROBIOLOGICAL AND PHYSICO-CHEMICAL PROPERTIES EP 871 (rev.1)

Yeast count (<i>Torulaspota delbrueckii.</i>) [UFC/g]	> 10 ¹⁰
Other yeasts [UFC/g]	< 10 ⁵
Moulds [UFC/g]	< 10 ³
Lactic bacteria [UFC/g]	< 10 ⁵
Acetic bacteria [UFC/g]	< 10 ⁴
<i>Salmonella</i> [UFC/25 g]	Ausencia
<i>E. coli</i> [UFC/g]	Ausencia
<i>Staphylococcus aureus</i> [UFC/g]	Ausencia
Total coliforms [UFC/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 °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

Product in compliance with the International Oenological Codex and the EC Regulation 606/2009.