Fermentis by Lesaffre

ACTIVE DRY YEAST

SafŒno™ Amplify TD-70

TO ENHANCE AROMATIC COMPLEXITY AND MOUTHFEEL

Ingredients:

Yeast (*Torulaspora delbrueckii*), Emulsifier: Sorbitan monostearate (E/INS 491).

Origin:

The selection of **SafŒno™ Amplify TD-70** is the result of the screening of several hundred microorganisms from different wine-growing regions across three different vintages. **SafŒno™ Amplify TD-70** was isolated in France in a Bordeaux vineyard.

Œnological characteristics:

Used in sequential inoculation with a selected *Saccharomyces cerevisiae*, **SafŒno™ Amplify TD-70** will enhance the aromatic complexity and mouthfeel of the wine without altering its typicity and distinctive characteristics.

This microbial association produces a controlled complex ecosystem in the must and during fermentation, which ensures complete alcoholic fermentation.

Pre-fermentative and fermentative abilities

- Alcohol tolerance observed: up to 13% vol. We recommend sequential inoculation with a selected *Saccharomyces cerevisiae* to ensure healthy fermentation progress, clean aroma expression, and clean fermentation finish in all conditions.
- Large spectrum of fermentation temperature tolerance: 13 to 25°C (53.6 – 78.8°F).
- Copper tolerance observed: up to 9 mg/L.
- SO_2 tolerance observed: up to 3 g/hL (30 ppm of TSO_2).
- Medium nitrogen requirements: ratio YAN (mg/L) / Initial sugars (g/L) ≥ 0.8 – 0.9
- High colonization and maintenance of the population in the musts and during alcoholic fermentation.
- Very low production of undesirable compounds (volatile acidity, SO_2 and H_2S).

Recommended usage:

SafŒno™ Amplify TD-70 is suited for the fermentation of all types of red, white, and rosé wines. This strain was selected for its high power of colonization of grape musts, the maintenance of its population during alcoholic fermentation, and its tolerance to SO_2, copper, and alcohol.
It is recommended for:

- Full-bodied and fruity red wines.
- Enhanced expression of varietal characters of white and rosé wines.
- Higher aromatic complexity and intensity.

Fermentis division of S.I. Lesaffre • BP 3029 - 137 rue Gabriel Péri - 59703 Marcq-en-Barœul Cedex - France • Tel.: +33(0)3 20 81 62 75 • Fax: +33(0)3 20 81 62 70 • www.fermentis.com

ACTIVE DRY YEAST

Trials:

A trial was conducted on Chardonnay grapes from the Loire Valley (vintage 2024). The grapes were harvested by hand, then destemmed, pressed, and the juice clarified with enzymes. A 3 g/hL sulfite addition was made at the start of fermentation (day 0).

Fermentation nutrition was adjusted to reach a nitrogen-to-sugar ratio of 0.8 mg/g, with DAP (20 g/hL) and SpringFerm™ Equilibre (20 g/hL) both added on day 0.

The study compared five *Torulaspora delbrueckii* strains as candidates (Td1 to Td4, and **SafŒno™ Amplify TD-70**), two commercial *T. delbrueckii* strains, and one control without *T. delbrueckii.*
The yeast inoculation followed a two-step strategy:

- Day 0: each modality (except the control) was inoculated with its respective *T. delbrueckii* strain at 20 g/hL, with fermentation starting at 17°C.
- Day 3: all modalities were inoculated with SafŒno™ VR44 (20 g/hL) to complete fermentation.

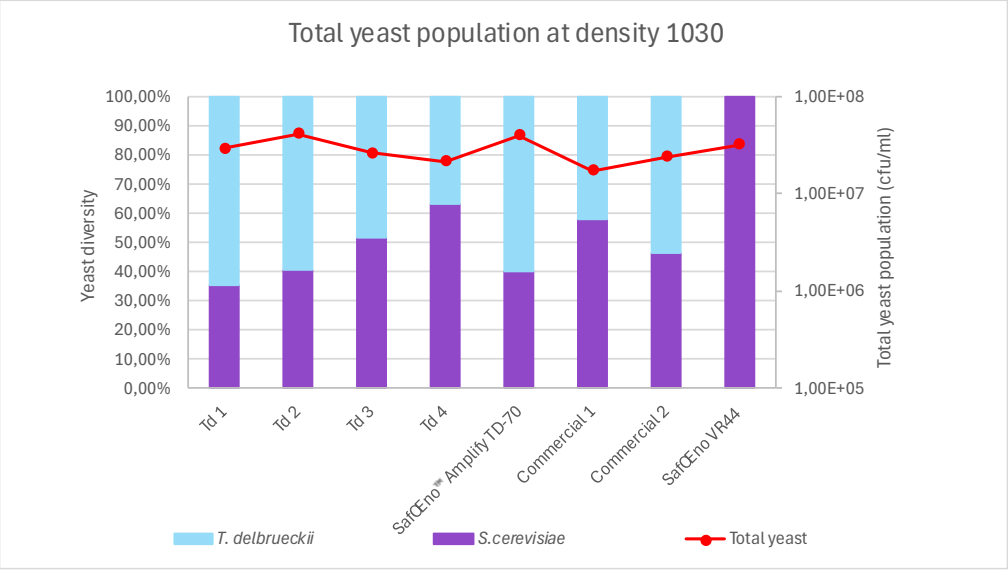
For the control, no *T. delbrueckii* was used; it received only SafŒno™ VR44 (20 g/hL) on day 0.

Chemical characteristics of the must: Sugars: 210 g/L ; pH: 3.04 ; Total acidity: 5,76 g/L H_2SO_4 ; Titrable acidity: 8,7 g/L tartaric acid ; YAN: 82 mg/L

The alcoholic fermentation, ensured by the combination of **SafŒno™ Amplify TD-70** and SafŒno™ VR44, was completed in 28 days.
The control SafŒno™ VR44 modality completed fermentation in 22 days.

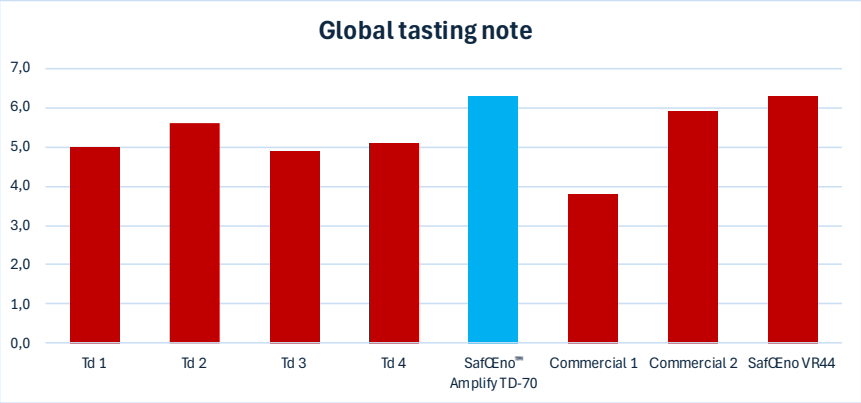
Chemical analyses show significantly less volatile acidity production for the **SafŒno™ Amplify TD-70** and SafŒno™ VR44 modality.

Figure 1: Monitoring of the total yeast population at density 1030 during alcoholic fermentation



The monitoring of the populations of different strains of *T.delbrueckii* shows significant differences and a clear cofermentation with *S. cerevisiae*.
The **SafŒno™ Amplify TD-70** strain represents 60% of the total yeast population at density 1030.

Figure 2: Tasting preference evaluation



The aromatic profile of the wine fermented with **SafŒno™ Amplify TD-70** + SafŒno™ VR44 yeast has the highest preference score compared to other *Torulaspora delbrueckii* strains fermented with SafŒno™ VR44.

The profile of the wine obtained with cofermentation of **SafOeno™ Amplify TD-70** + SafŒno™ VR44 yeast differs from that fermented with only SafŒno™ VR44 yeast by more complexity (aromas of yellow fruits, peaches, apricot) and more mouthfeel.

Directions of use:

With prior rehydration: gently pour the desired quantity of **SafŒno™ Amplify TD-70** into 10 times its weight of tap water **between 25°C (77°F) and 30°C (86°F).** Gently stir to complete yeast rehydration and prevent the formation of lumps. Leave to rest for 20 minutes, then incorporate the yeast starter into the fermentation tank with homogenization.

Sequential association of yeasts:
Add 20 g/hL of **SafŒno™ Amplify TD-70** to the must. For red wines, with higher initial indigenous microbial charge, 30 g/hL of **SafŒno™ Amplify** TD-70 leads to higher performance.
After 24 - 72 hours, add 20 g/hL of your selected *S. cerevisiae.* Fermentation activity is sometimes observed only after the *S. cerevisiae* inoculation. Nonetheless, **SafŒno™ Amplify TD-70** has demonstrated the ability to persistently contribute to the alcoholic fermentation, reliably enhancing the organoleptic properties of the wine.

For sequential inoculations, we recommend providing no less than 0.9 mg/L YAN for each g/L of sugar in the must to ensure that both the *Torulaspora* and *Saccharomyces* have enough nitrogen to grow and ferment in the best conditions.

Dosage:

Recommended dose: 20 g/hL (24.3 oz/1000 gal)

Packaging:

Cardboard box of 20 vacuum-packed sachets of 500g / 1.1 lb each (Full box net weight: 10 kg / 22.05 lb).

Fermentis division of S.I. Lesaffre • BP 3029 - 137 rue Gabriel Péri - 59703 Marcq-en-Barœul Cedex - France • Tel.: +33(0)3 20 81 62 75 • Fax: +33(0)3 20 81 62 70 • www.fermentis.com

ACTIVE DRY YEAST

Storage and compliance:

Store or transport in a dry place, protected from direct sunlight, **at a temperature between 4 and 10°C (39.2 to 50°F).** Shelf life: 2 years. Refer to the "best before" date printed on the sachet. Opened sachets must be sealed and stored between 4 and 10°C and used within 7 days of opening. Do not use soft or damaged sachets.

Fermentis guarantees the product complies with International Œnological Codex specifications until its Best Before End Date in the storage conditions mentioned above.

Each Fermentis yeast is developed under a specific production scheme and benefits from the know-how of Lesaffre, a world leader in yeast manufacturing. This guarantees the highest microbiological purity and maximum fermentation activity.

Fermentis division of S.I. Lesaffre • BP 3029 - 137 rue Gabriel Péri - 59703 Marcq-en-Barœul Cedex - France • Tel.: +33(0)3 20 81 62 75 • Fax: +33(0)3 20 81 62 70 • www.fermentis.com