ZYMAFLORE® *Alpha*$^{TD\ n.\ sacch.}$

... Potential for *biodiversity*

Non-*Saccharomyces* yeast for the production of wines with strong aromatic complexity and generous length and volume on the palate.

Selected non-GMO Active Dry Yeast (ADY) for use in winemaking. Qualified for the elaboration of products for direct human consumption in the field of the regulated use in Oenology. In accordance with the current EU regulation n° 2019/934.

SPECIFICATIONS AND OENOLOGICAL APPLICATIONS

Strain of the species *Torulaspora delbrueckii* resulting from *Terroir*-selection. This non-*Saccharomyces* strain brings aromatic complexity of great purity as well as good mouthfeel. Can produce up to 10% alcohol on average. It is perfectly suitable for making expressive and full-bodied wines, when used in sequential inoculation with a strain of *S.cerevisiae*.

The association of **ZYMAFLORE® Alpha**$^{TD\ n.\ Sacch}$ to a *S.cerevisiae* produces a complex ecosystem of musts in fermentation and ensures a complete alcoholic fermentation.

FERMENTATION CHARACTERISTICS:

- Alcohol tolerance observed: up to 10% vol.
- Medium nitrogen requirements.
- Large spectrum of fermentation temperature tolerance: 12 - 26°C (53.6 - 78.8°F).
- Low production of volatile acidity, volatile phenols and H_2S.

AROMATIC CHARACTERISTICS:

- Pof (-) strain: does not possess cinnamate decarboxylase, which is responsible for the formation of aroma masking vinyl-phenols, when unpurified enzymes were used.
- Good revelation of thiol-type varietal aromas (3SH, 3SHA: grapefruit, tropical fruits) in association with a S.*cerevisiae*.

Observation:

- Significant volume and length on the palate.

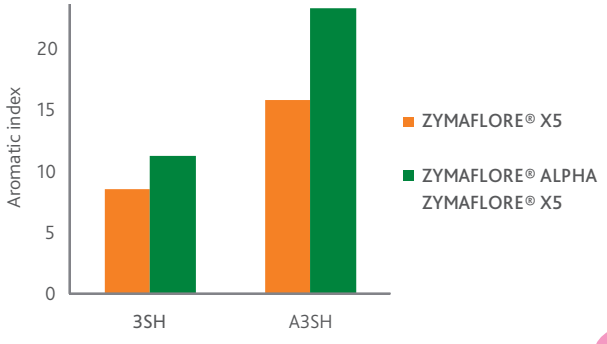
EXPERIMENTAL RESULTS

Colombard, 2009

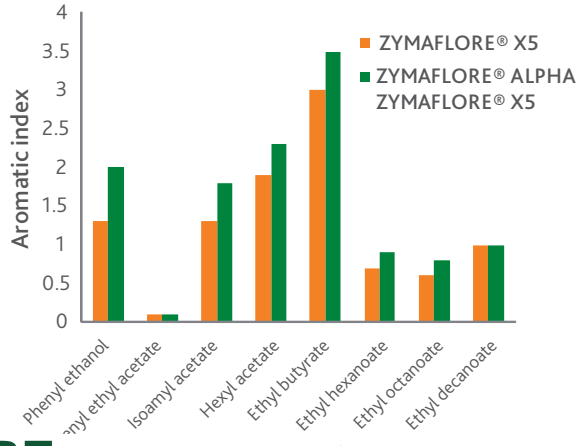
Alcohol: 12.5% vol, 100 NTU, fermentation temperature 16 - 20°C (60.8 - 68°F).

Sequential association of yeasts: 30 g/hL (300 ppm) **ZYMAFLORE® Alpha**$^{TD\ n.\ Sacch}$/ 20 g/hL (200 ppm) X5 added 24hrs afterwards.

Average fermentation: 15 days/ Average volatile acidity: 0.17 g/L H_2SO_4 (0.21 g/L acetic acid).



Revelation of varietal aromas (thiols).



Esters production.

LAFFORT

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PHYSICAL CHARACTERISTICS

Dehydrated yeast (vacuum-packed).

Aspect ..... Granular

CHEMICAL AND MICROBIOLOGICAL ANALYSIS

Humidity (%)	< 8
Viable SADY cells (CFU/g)	≥ 10^{10}
Lactic acid bacteria (CFU/g)	< 10^{5}
Acetic acid bacteria (CFU/g)	< 10^{4}
Yeasts of a different genus, species or strain (%)	<5
Coliforms (CFU/g)	< 10^{2}
E. coli (/g)	None
Staphylococcus (/g)	None
Salmonella (/25 g)	None
Moulds (CFU/g)	< 10^{3}
Lead (ppm)	< 2
Arsenic (ppm)	< 3
Mercury (ppm)	< 1
Cadmium (ppm)	< 1

PROTOCOL FOR USE

SEQUENTIAL ASSOCIATION OF YEASTS:

Important: rehydrate ZYMAFLORE® Alpha$^{TD\ n.\ Sacch}$ in water at 25 - 30 °C (77 - 86°F).

- Dry wines:

Add 30 g/hL (300 ppm) of **ZYMAFLORE® Alpha$^{TD\ n.\ Sacch}$** to the must, then 24 - 72 hrs afterwards, add 20 g/hL (200 ppm) of *S. cerevisiae* (**ZYMAFLORE® XPURE, ZYMAFLORE® FX10, ZYMAFLORE® RX60, ZYMAFLORE® X16, ZYMAFLORE® X5**…).

- Sweet wines:

Add 40 g/hL (400 ppm) of **ZYMAFLORE® Alpha$^{TD\ n.\ Sacch}$** to the must, then 5 - 10 hrs afterwards, add 20 g/hL (200 ppm) of *S. cerevisiae* (**ZYMAFLORE® ST**…).

APPLICATION IN BIOPROTECTION:

Add 2 to 10 g/hL (20 to 100 ppm) of **ZYMAFLORE® Alpha$^{TD\ n.\ Sacch}$** directly on grape or must (sound harvest): then proceed to yeasting with *S. Cerevisiae* at 20 g/hL (200 ppm) to insure alcoholic fermentation.

IMPLEMENTATION

- Carefully follow the yeast rehydration protocol indicated on the packet.
- Avoid temperature differences exceeding 10°C (18°F) between the must and the yeast during inoculation. Total yeast preparation time must not exceed 45 minutes.

STORAGE RECOMMENDATION

- Store off the ground in the unopened original packaging at a moderate temperature in a cool area (2-10°C / 36-50°F) not liable to impart odours.
- Optimal date of use: 30 months.

PACKAGING

500 g vacuum bag. 10 kg box.

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