ZYMAFLORE® X5

Saccharomyces cerevisiae yeast for the production of technological white and rosé wines with a high aromatic intensity. 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

ZYMAFLORE® X5 is a strain derived from breeding, combining excellent revelation of thiol-type *varietal aromas* (particularly 4MMP) and high *fermentation aroma* production. Perfectly suited to the production of modern (Popular Premium, Premium), fresh and *complex* white and rosé wines, guaranteeing fermentation security even under difficult conditions: low turbidity, low temperature.

FERMENTATION CHARACTERISTICS:

- Alcohol tolerance: up to 16% vol.
- · Medium to high nitrogen requirements.
- Tolerance to low temperature: from 13°C* (55.4°F).
- Tolerance to low turbidity (< 50 NTU).
- Low production of volatile acidity and H₂S.

AROMATIC CHARACTERISTICS:

Complex and intense aromatic profile:

- Very high revelation of thiol-type varietal aromas (4MSP, 3SH, 3SHA: boxwood, citrus, tropical fruits).
- Good production of fermentation aromas (IA, PEA, PE: fruity, floral).
- * It is possible to add yeast at 8 10°C (46.4 -50°F) after settling; it is essential that the yeast is acclimatised to the temperature by consecutive addition of portions of the juice.

EXPERIMENTAL RESULTS

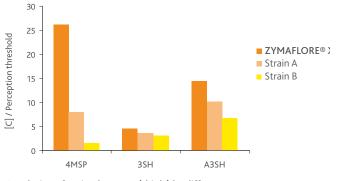
Trial at LAFFORT® experimental centre, Bordeaux region.

Sauvignon blanc, 2005.

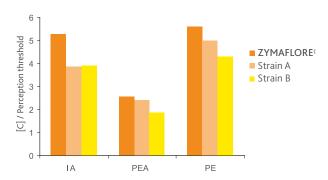
Potential alcohol: 13% vol, 40 NTU, fermentation temperature 16°C (60.8°F), nitrogen correction to 180 mg/L.

Yeast addition at 20 g/hL (200 ppm), positive implantation controls.

Fermentation in 10 days, Volatile Acidity 0.19 g/L H₂SO₄ on average (0.23 g/L acetic acid).



Revelation of varietal aromas (thiols) by different yeasts. 4MSP: boxwood - 3SH: citrus - 3SHA: tropical fruit



Production of fermentation aromas by different yeasts.

IA: banana - PEA; PE: floral



CHEMICAL AND MICROBIOLOGICAL ANALYSIS

Humidity (%)< 8
Active dry yeast (ADY) (CFU/g) $\geq 2.10^{10}$
Lactic acid bacteria (CFU/g)< 10 ⁵
Acetic acid bacteria (CFU/g)< 10 ⁴
Yeasts of a genus other than Saccharomyces (CFU/g) $< 10^5$
Yeasts of a different 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

OENOLOGICAL CONDITIONS

- Inoculate with the yeast as soon as possible post 20 30 g/hL (200 300 ppm). rehydration.
- · Respect the prescribed dose to ensure a good yeast implantation, even in case of abundance of indigenous yeasts.
- Temperature, yeast strain, rehydration and winery hygiene are also essential for successful implantation.

DOSAGE

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.
- · In the case of potentially high alcohol concentrations and to minimise volatile acidity formation, use **DYNASTART® / SUPERSTART® BLANC** in rehydration water.

STORAGE RECOMMENDATION

- Store above ground level in a dry area not liable to impart odours. Ensuring stock is kept at a moderate temperature, in its original, unopened packaging.
- · Optimal date of use: 4 years.

PACKAGING

500 g vacuum bag. 10 kg box.

