

# **ZYMAFLORE® KLIMA**

Saccharomyces cerevisiae yeast selected for its ability to lower the alcohol content while enhancing the freshness of wines. Selected Active Dry Yeast (ADY), non GMO, for oenological use. Suitable for the preparation of products intended for direct human consumption, in the scope of regulated use in oenology. Complies with Commission Regulation (EU) 2019/934.

#### SPECIFIC CHARACTERISTICS AND OENOLOGICAL PROPERTIES

**ZYMAFLORE® KLIMA** is the result of a marker-assisted selection program (QTL), enabling winemakers to reduce the ethanol content of wines while preserving their acidity. This strain is particularly adapted for production of harmonious, well-balanced white, rosé and red wines, with exceptional freshness and elegance.

#### **FERMENTATION CHARACTERISTICS**

- Decrease of ethanol content of up to 0.5 % vol.
- · Preservation or production of malic acid during AF.
- Regular fermentation kinetics. Ethanol tolerance: 16 % vol.
- · High nitrogen demands.
- Very low production of volatile acidity and SO<sub>2</sub>.
- Fermentation temperature (optimum): 14 30°C \*

# AROMATIC CHARACTERISTICS

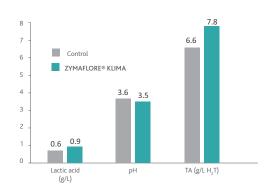
- Elegant aromatic profile: fruity and floral notes.
- · Imparts vivacity and aromatic freshness.

## **EXPERIMENTAL RESULTS**

**ZYMAFLORE® KLIMA** can decrease ethanol content and pH levels, while increasing titratable acidity and malic acid in wines.

Parameters	Control yeast	ZYMAFLORE® KLIMA
Alcohol (% vol)	13.6	13.1
рН	3.5	3.4
Total acidity (g/L tartaric acid)	7.2	8.9
Malic acid (g/L)	1.2	1.6

Due to the production of malic acid, the wines fermented with **ZYMAFLORE® KLIMA** contain higher levels of lactic acid post-MLF.



Impact of ZYMAFLORE® KLIMA on the physicochemical parameters of a red wine post-FA (table) and post-MLF (graph).

Grapes: Merlot, Bordeaux, 2022; pH 3.5, TA 3.5 g/L H<sub>2</sub>T, malic acid 1.2 g/L.



<sup>\*</sup> It is possible to inoculate after cold settling at 8 - 13°C; yeast acclimatisation to low temperatures through successive additions of must is essential.

#### PHYSICAL CHARACTERISTICS

Dehydrated and vacuum-packed yeasts.

Appearance ...... granules

#### CHEMICAL AND MICROBIOLOGICAL ANALYSES

Humidity (%)< 8
Viable SADY cells (UFC/g) $\geq 2.10^{10}$
Lactic acid bacteria (UFC/g) < 10 <sup>5</sup>
Acetic acid bacteria (UFC/g ) $< 10^4$
Yeasts of a genus other than Saccharomyces (UFC/g) $< 10^5$
Yeasts of a different genus, species or strain (%)< 5
Coliforms (UFC/g) < 10 <sup>2</sup>
E. coli (/g)none

Staphylococcus (/g) none
Salmonella (/25 g )none
Moulds (CFU/g) < 10 <sup>3</sup>
Lead (ppm)< 2
Arsenic (ppm)< 3
Mercury (ppm) < 1
Cadmium (ppm) < 1

#### **PROTOCOL FOR USE**

### **OENOLOGICAL CONDITIONS**

- Inoculate as soon as possible after filling the tank.
- Comply with the specified doses to ensure proper establishment of the yeast even when there is a high population of indigenous yeasts.
- Temperature, quality of rehydratation and cellar hygiene are also essential for proper establishment.

#### DOSE

• 20 - 30 g/hL.

# ADDITION

- Carefully follow the yeast rehydration protocol.
- Avoid temperature differences greater than 10°C between the must and the starter. The total preparation time for the starter should not exceed 45 minutes.
- In the case of particularly difficult fermentation conditions (very low temperature, highly clarified must, very high potential alcohol) and/or to optimise the aromatic performance of the yeast, use SUPERSTART® BLANC or SUPERSTART® ROUGE in the rehydration water.

#### STORAGE RECOMMENDATION

# PACKAGING

- Store off the ground in the original unopened packaging at a moderate temperature in a dry area not liable to impart odours.
- 500 g vacuum bag. 10 kg box.

• Optimal date of use: 4 years

