



# POWERLEES®

(Ex POWERLEES® *Rouge*)

Specific formulation of inactivated yeast and  $\beta$ -glucanases, utilised for wine fining from the outset of alcoholic fermentation.

*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

Due to its specific composition, POWERLEES® provides:

- Inactivated yeast rich in mannoproteins (stabilizing effect) and in membrane protein Hsp12 (the origin of peptides with sweetening power).
- A  $\beta$ -glucanase ( $\beta$  1-3,  $\beta$  1-6) that accelerates extraction of the above mentioned components, for an early diffusion into the wine.

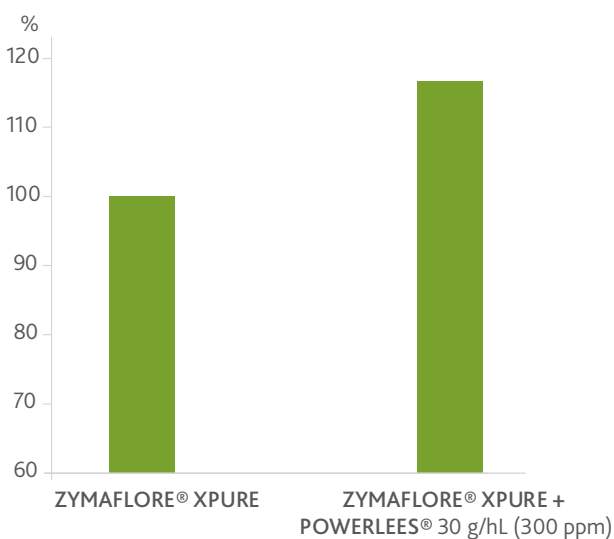
Therefore POWERLEES®

- Brings yeast cell components from the fermentation phase to fine and soften wines.
- Facilitates the extraction of compounds with high sensory potential (sapid peptide from Hsp12 protein) present in the cell envelopes of inactivated yeast, but also from fermentation yeast autolysis.
- Contributes to wine stabilization by diffusing fractions of mannoproteins originated from yeast.
- Eases the filtration steps.

Specifically adapted for rapid distribution wines.

## EXPERIMENTAL RESULTS

POWERLEES® allows, from the end of the AF, the efficient diffusion of bigger fractions of the sapid peptide from the Hsp12 protein.



*Fermentation in synthetic media at 25°C (77°F). Yeasting with ZYMAFLORE® XPURE at 20 g/hL (200 ppm). Hsp12 Dosage via HPLC, C18. Additions of formulations in the beginning of FA.*



**LAFFORT**

*l'œnologie par nature*

## PHYSICAL CHARACTERISTICS

Aspect ..... powder

Colour ..... light beige

## CHEMICAL AND MICROBIOLOGICAL ANALYSES

Humidity (%) ..... < 10

$\beta$ -glucanase ( $\beta$ -1,3) (normalized maltodextrine) (U/g) ... 100

Lactic acid bacteria (CFU/g) ..... < 10<sup>3</sup>

Acetic bacteria (CFU/g) ..... < 10<sup>3</sup>

Coliforms (CFU/g) ..... < 10<sup>2</sup>

*E.coli* (/25 g) ..... none

*Staphylococcus* (/g) ..... none

*Salmonella* (/25 g) ..... none

Mycotoxins ..... none

Lead (ppm) ..... < 3

Arsenic (ppm) ..... < 3

Mercury (ppm) ..... < 1

Cadmium (ppm) ..... < 1

## PROTOCOL FOR USE

### OENOLOGICAL CONDITIONS

- Red winemaking: **POWERLEES**® can be added to grapes during vatting, to must during homogenisation, during alcoholic fermentation, or at pressing between AF and MLF.
- During wine ageing (red, white and rosé wines): **POWERLEES**® allows the establishment of a selected and non-fermentative biomass, from which high sensory and stabilizing components will be extracted and will contribute to the fining and high quality of wines.

### DOSAGE

- Between 15 and 40 g/hL (150 - 400 ppm) according to the desired effect.

## IMPLEMENTATION

It is recommended to dissolve **POWERLEES**® in 5 to 10 times its volume of water. After the addition, blend well by pumping-over the tanks or stirring the barrels.

## 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: 3 years.
- Do not use opened packaging.

## PACKAGING

1 kg bags - 10 kg boxes.

5 kg bags - 10 kg boxes.

