

POWERLEES™

Specific formulation of inactivated yeast and β-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 β-glucanase (β 1-3, β 1-6) that accelerates extraction of the above mentioned components, for an early diffusion into the wine.

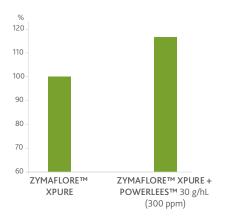
Therefore POWERLEES™:

- 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 envelops 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.



PHYSICAL CHARACTERISTICS

Aspect	powder	Colourl	ight beige

CHEMICAL AND MICROBIOLOGICAL ANALYSES

Humidity (%)< 10
β-glucanase ($β$ -1,3) (normalized maltodextrine) (U/g) 100
Lactic acid bacteria (CFU/g)< 10 ³
Acetic bacteria (CFU/g)< 10 ³
Coliforms (CFU/g)< 10 ²
<i>E.coli</i> (/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 **POWERLEESTM** 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: 4 years.
- · Do not use opened packaging.

PACKAGING

1 kg bags - 10 kg boxes. 5 kg bags - 10 kg boxes.



release the user from legal compliance and data security regulations