



71B™

YSEO™
PROCESS
Research in collaboration
with Washington State University

ORIGIN AND APPLICATION

For fresh and fruity “Nouveau” wines.

Isolated by the team led by J.Maugnet at INRAE (National Agricultural Research Institute), Narbonne, France.

Lalvin 71B™ is a high ester producer, which gives the wines a characteristic fruity (fruit salad) aroma. It is known for the production of the ester isoamyl acetate (3-methylbutyl acetate), an ester described as having a banana and pear aroma. Hence it is useful to use in ‘neutral’ grape varieties to increase the expression of fruity characters. The cell walls of **Lalvin 71B™** are also highly adsorptive of polyphenolic compounds, thus limiting the tannic structure of red wines.

The combination of producing esters high in the ‘fruity’ spectrum and the ability to limit tannic structure, this yeast early consumption fresh and fruity red wines. **Lalvin 71B™** is a relatively high producer of glycerol, which contributes to the mouthfeel effect of this yeast.

Lalvin 71B™ also undertakes malo-ethanolic fermentation, a biochemical pathway whereby some malic acid is degraded during alcoholic fermentation. Between 20-40% of malic acid in the juice can be metabolized this way.

The **Lalvin 71B™** yeast, was selected by nature, and has since been improved using the Lallemund proprietary process called YSEO®.



MICROBIAL AND OENOLOGICAL PROPERTIES

- Recommended for white, rosé and red wines.
- *Saccharomyces cerevisiae var. cerevisiae*
- Fermentation temperature: 15-30°C
- Short lag phase and moderate fermentation vigour.
- Low relative nitrogen demand (under controlled laboratory conditions)
- Low production of H₂S.
- Alcohol tolerance 14% v/v **subject to fermentation conditions.*
- Low relative potential for SO₂ production.
- High relative glycerol production.
- Killer factor sensitive.

YSEO™ signifies Yeast Security and Sensory Optimization, a unique Lallemund yeast production process to meet demanding fermentation conditions. While not all yeast benefit from this process, YSEO™ improves the reliability of alcoholic fermentation by improving yeast quality and performance and reduces the risk of organoleptic deviation even under difficult conditions. YSEO™ yeasts are 100% natural and non-GMO.



MICROBIAL AND OENOLOGICAL PROPERTIES (cont'd)

- Highly compatible to malolactic fermentation. The yeast has low-medium nutrient needs and does not produce inhibitory compounds, hence ideal in the yeast / lactic acid bacteria) co-inoculation regime.
- Medium foam producer.
- High requirements to survival factors in oxygen deficient musts. Highly recommended to use either Go-Ferm Protect® / Go-Ferm Protect Evolution™ to rehydrate the yeast.
- Suggested varieties – Neutral whites, early release reds.

FURTHER READING *(Please request this booklet from your Lallemand representative).*

Lallemand Winemaking Update – Number 1 2008: 'The YSEO® Process'

Evaluation of the YSEO® Process to prepare dried winemaking yeast – Summary of a study done by Washington State University and Lallemand.

Lallemand 'The Wine Expert' – Practical Winemaking Information – Glycerol and winemaking.

INSTRUCTION FOR USE

Dosage Rate:

- 25g/hL of Active Dried Yeast (this will provide an initial cell population of approximately 5×10^6 viable cells/mL)
- 30g/hL of Go-Ferm Protect® / Go-Ferm Protect Evolution™
- Nitrogen source from the Fermaid™ range

Procedure for 1000L ferment.

- 1) Add 300g of Go-Ferm Protect® / Go-Ferm Protect Evolution™ to 5L of 40-43°C clean, chlorine free water. Stir until an homogenous suspension free of lumps is achieved.
- 2) When the temperature of this suspension is between 35-40°C, sprinkle 250g of yeast slowly and evenly onto the surface of the water, whilst gently stirring. Ensure any clumps are dispersed.
- 3) Allow to stand for 20 minutes before further gently mixing.
- 4) Mix the rehydrated yeast with a little juice, gradually adjusting the yeast suspension temperature to within 5-10°C of the juice/must temperature.
- 5) Inoculate into the must.

Further Notes

- Steps 1-5 should be completed within 30 minutes.
- It is best to limit first juice/must volume addition to one tenth the yeast suspension volume and wait 10 minutes before the addition to juice.
- To minimize cold shock, ensure temperature changes are less than 10°C.
- It is recommended that juice / must be inoculated no lower than 18°C.
- It is recommended to use complex nutrition nitrogen source, such as either **Fermaid AT™** or **Fermaid O™**.

PACKAGING AND STORAGE

- All Active Dried Yeast should be stored dry, best practice between 4-12°C and the vacuum packaging should remain intact.

The information herein is true and accurate to the best of our knowledge; however, this data sheet is not to be considered as a guarantee, expressed or implied, or as a condition of sale of this product.



WINE
YEASTS



WINE
BACTERIA



NUTRIENTS
/PROTECTORS



SPECIFIC
INACTIVATED YEASTS



ENZYMES



CHITOSAN



VINEYARD
SOLUTIONS



LALLEMAND OENOLOGY

Original **by culture**