LALVIN® BM4X4®

ORIGIN AND APPLICATION

Creates a wine with increased aromatic intensity, colour intensity, length of finish and dependable fermentation kinetics.

Lallemands research department (Languet, 2005) in collaboration with INRA, Montepellier, France, analysed potential interactions between yeast (in the right ratio) to determine good combinations of Lallemand yeast to be used in co-inoculation. ***Lalvin BM4X4®*** is one result of such an investigation.

The Lallemand yeast, ***Lalvin BM45®***, acquired a solid reputation in delivering unique and desirable sensory qualities to wine, however its fermentation kinetics were not desirable to many winemakers. During investigations undertaken by Lallemand in collaboration with INRA, ***Lalvin BM4X4®*** was developed. This product, demonstrates the sensory qualities of ***Lalvin BM45®***, but has excellent and reliable fermentation kinetics, a concept called "Dynamic Synergy".

During the yeast growth phase ***Lalvin BM4X4®*** releases a significant quantity of polysaccharides. This results in a round mouthfeel, increases stability of colour and lowers the astringency of tannins (by stabilizing and binding polyphenols in the must).

Lalvin BM4X4® is therefore suited for red wines, where mouthfeel, colour and reliable fermentation kinetics are sought. It is also suited to the production of full-bodied white wines.

MICROBIAL AND OENOLOGICAL PROPERTIES

- Recommended for red wines and full-bodied white wines.
- *Saccharomyces cerevisiae var. cerevisiae*
- Fermentation temperature: 16-28°C
- Moderate lag phase and moderate fermentation vigour.
- Medium-high relative nitrogen demand (under controlled laboratory conditions)
- Alcohol tolerance 16% v/v * *subject to fermentation conditions*.
- Moderate relative potential for SO_2 production.
- Moderate producer of H_2S at low YAN
- Killer factor active
- ***Lalvin BM4x4®*** has elevated nutrient needs and so is not considered MLF friendly. Not recommended for co-inoculation of yeast and lactic acid bacteria. Ensure adequate nutrients when used in sequential inoculation.
- Suggested varieties – General all-rounder for reds and full-bodied whites such as Chardonnay.

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

Lallemand Winemaking Update N0 2 – 2006 – "New Fermentation Strategy: Dynamic Synergies".

INSTRUCTION FOR USE

Dosage Rate:

- 25g/hL of Active Dried Yeast (this will provide an initial cell population of approximately 5 x10^6 viable cells/mL)
- 30g/hL of Go-Ferm Protect Evolution™
- Nitrogen source from the Fermaid™ range

Procedure for 1000L ferment.

1) Add 300g of 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 K™** or **Fermaid O™**.

PACKAGING AND STORAGE

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