

SACCHAROMYCES CEREVISIAE

LALVIN

All the advantages
of Lalvin BM 45

Greater reliability

With a positive impact on
both red and white wines



DYNAMIC SYNERGY

Through many months of research, Lallemand has developed a new yeast production based on the concept of dynamic synergy - the Lalvin BM 4x4.

Lalvin BM 4x4 is based on dynamic synergy of specific yeast strains to optimize the sensory profile of the wine and with reliable fermentation kinetics. This new concept combines the unparalleled advantages of Lalvin BM 45 - known and appreciated around the world for contributing to round mouthfeel and stable colour - with the capability to consistently complete fermentations in diverse and difficult conditions.

APPLICATIONS

During alcoholic fermentation, Lalvin BM 4x4 releases a significant quantity of parietal polysaccharides, including certain molecules that have the remarkable ability to bind and stabilize the polyphenols in the must. This increases the stability of the colour and systematically lowers the astringency of the tannins. The quantity and the quality of the polysaccharides released during fermentation, followed by yeast cell autolysis, facilitate the production of red wines that respond to consumer expectations. Lalvin BM 4x4 also increases roundness in white wines and can also help with the onset of malolactic fermentation.

The dynamic synergy of Lalvin BM 4x4 has been considered to transmit all the advantages of BM 45.

The BM 45 was isolated as part of a research program in Montalcino, in the heart of the Tuscany region (Italy), and selected in collaboration with the consortium of Brunello di Montalcino wines and the Università degli Studi di Siena.

BM 4x4: THE ADVANTAGES OF BM 45

MICROBIOLOGICAL AND ŒNOLOGICAL PROPERTIES

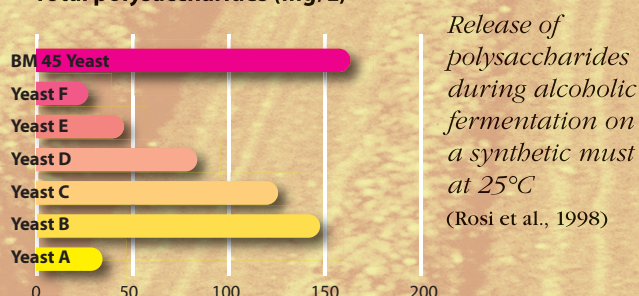
- *Saccharomyces cerevisiae*
- Competitive factor K2
- Alcohol tolerance: up to 16% alcohol
- Average lag phase
- Average fermentation rate facilitates maceration management
- Optimal fermentation temperature: 16° to 28°C (depends on initial sugar level)
- Low foam production
- Facilitates malolactic fermentation
- Low SO₂ production

THE QUANTITY AND QUALITY OF POLYSACCHARIDES

	Yeast 1	Lalvin BM45	% Variation
PVPP index	38	45	+18
Ethanol index	7,7	9,2	+20
Tannic astringency	47,5	39,2	-18

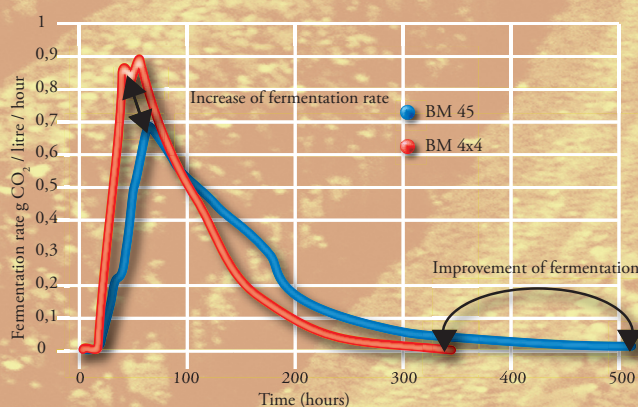
Impact of BM 45 yeast on colour stability (PVPP index) and the tannic quality of a wine made from the Tannat varietal from the Madiran region (France), 2000 vintage. Measurements taken after three months of aging on lees.

Total polysaccharides (mg/L)



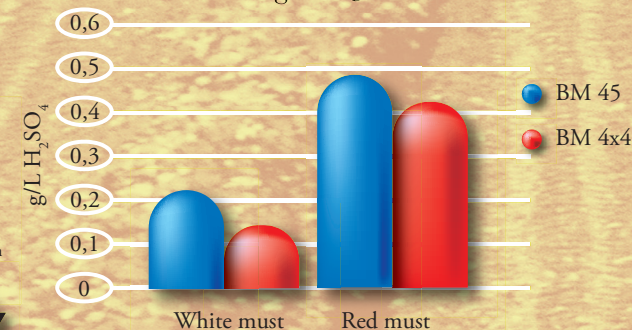
BM 4x4: THE ADVANTAGES OF DYNAMIC SYNERGY

Lalvin BM 4x4: Optimized fermentation capacity



Lalvin BM 4x4: Decrease in volatile acidity

INRA trials – Pech Rouge 2003



Lalvin BM 4x4: Decreased nitrogen requirement.

DOSAGE

**For red and white winemaking:
25 g to 40 g/hL**

Note: dosage range is based on the must sugar content and sanitary state of the grapes and winery.

HOW TO USE

- Rehydrate in 10 times its weight of water, at 40°C.
- Let stand for at least 20 minutes then gently stir occasionally to break up any clumps.
- Add to the must.

- Total rehydration time must not exceed 45 minutes
- Avoid cold shocking the yeast. The temperature drop between the must to be inoculated and the rehydration medium should never be >10°C (if any doubt, please contact your supplier or Lallemant)
- It is essential to rehydrate the yeast in a clean container.
- Initial rehydration in must is not advisable.

Distributed by:

Selected and produced by

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