

# LALVIN BM45™

*Saccharomyces cerevisiae*

## Enhanced mouthfeel, complexity and color stability in premium red wines

### DESCRIPTION

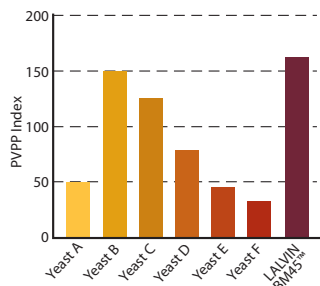
The LALVIN BM45™ strain was isolated from nature in the vintages 1991 to 1994 in collaboration between the Consorzio del Vino Brunello di Montalcino and the University of Siena (Tuscany, Italy). This strain was selected from world class Brunello (Sangiovese) fermentations for its oenological characteristics.



### BENEFITS & RESULTS

LALVIN BM45™ is a relatively slow starter and is well-suited for long maceration processes. It produces high levels of polyphenol reactive polysaccharides resulting in wines with great mouthfeel and improved colour stability. It contributes to jam, spicy and earthy elements in wines. It has the capacity to reduce (mask) green vegetative characteristics whether variety influenced such as from Cabernet Sauvignon or due to early picking. This yeast has high nitrogen requirements, so a thorough nutrient strategy is required. It tends to finish relatively slowly, so careful management of environmental parameters is required. Due to the sensitivity of LALVIN BM45™ and its high nutritional requirements, Lallemmand highly recommends the use of a GOFERM™ yeast rehydration product during yeast rehydration, for steady fermentation kinetics. Highly recommended for many red varieties where mouthfeel is desired. Also recommended to use on full-bodied whites such as Chardonnay.

### Yeast polysaccharides and benefits to wine quality



Effect of LALVIN BM45™ on the color stability (PVPP index) and astringency of a Tannat wine from the Madiran region. Measurements carried out after 3 months of maturation "sur lies" (Fuster and Escot)

	Yeast 1	LALVIN BM45™	Variation %
Anthocyanins (mg/L)	855.0	875.0	+2
PVPP index	38.0	45.0	+18
Ionization index*	54.0	75.0	+39
Tannins (g/L)	5.6	5.8	+4
Ethanol index**	7.7	9.2	+20
Astringency	47.5	39.2	-18

\* (measures the proportion of coloured and uncoloured anthocyanins)  
\*\* (reflects the tannin/polysaccharide condensation)

Wine key parameters related to color and tannin quality measured after an alcoholic fermentation in synthetic must at 25 °C (Rosi et al.)

- PROPERTIES\***
- *Saccharomyces cerevisiae* var. *cerevisiae*
  - Optimum fermentation temperature range: 18 to 28 °C
  - Alcohol tolerance up to 15% v/v
  - Moderate lag phase
  - Moderate fermentation rate, suited to long maceration programs
  - Competitive ("Killer K2") factor neutral
  - Medium-high nutritional requirement
  - Moderate-high SO<sub>2</sub> production
  - LALVIN BM45™ has elevated nutrient needs and produces a high level of SO<sub>2</sub> and so is not considered MLF friendly. Ensure adequate nutrition program and MLF management.
- \*subject to fermentation conditions*

## INSTRUCTIONS FOR OENOLOGICAL USE

### Dosage rate:

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

### Procedure for 1000 L ferment.

1. Add 300 g of Go-Ferm Protect Evolution™ to 5 L 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 250 g 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.

### + 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

- Available in 500 g
- Store in a dry place at 4-11 °C
- To be used once opened

Distributed by:

### LALLEMAND AUSTRALIA

23-25 Erudina Ave,  
Edwardstown, SA, 5039  
australiaoffice@lallemand.com  
+61 8 8276 1200

The information in this document is correct to the best of our knowledge. However, this data sheet should not be considered to be an express guarantee, nor does it have implications as to the sales condition of this product. February 2023.



WINE  
YEASTS



WINE  
BACTERIA



NUTRIENTS  
/PROTECTORS



SPECIFIC  
YEAST DERIVATIVES



ENZYMES



CHITOSAN



VINEYARD  
SOLUTIONS



LALLEMAND OENOLOGY

Original by culture