



### Saccharomyces cerevisiae

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

#### **DESCRIPTION** o

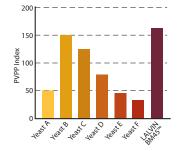
The LALVIN BM45™ strain was isolated from nature in the vintages 1991 to 1994 in collaboration between the Consorizo del Vino Brunello di Montalcino and the University of Sienna (Tuscany, Italy). This strain was selected from world class Brunello (Sangiovese) fermentations for its oenological characteristics.



## **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, Lallemand highly recommends the use of a GO-FERM™ 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



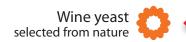
Effect of LALVIN BM45™ on the color stability (PVPP index) and astringency of a Tannat wine from the Madiran region. Measurements carried out after 3 months of maturation "sur lies" (Fuster and Escot)

	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  $^{\circ}$ 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

#### A. Rehydration without yeast protector

#### Dosage rate: 20 to 40 g/hL

- 1. Rehydrate the yeast in 10 times its weight in water (temperature between 35 °C and 40 °C).
- 2. Resuspend the yeast by gently stirring and wait for 20 minutes.
- 3. Mix the rehydrated yeast with a little juice/must, gradually adjusting the yeast suspension temperature to within 5-10 °C of the juice/must temperature.
- 4. Inoculate into the must.

#### B. Rehydration with a yeast protector

In musts with high alcohol potential (> 13% v/v), with low turbidity (< 80 NTU) or other challenging conditions, the use of one of our GO-FERM™ products (wine yeast protector) during yeast rehydration is recommended. Follow rehydration instructions according to the selected GO-FERM™ product.

#### Notes:

The total rehydration time should not exceed 45 minutes. It is crucial that a clean container is used to rehydrate the yeast. Rehydration directly in must is generally not advisable. Ensure yeast nutrition is appropriately managed during fermentation.

#### PACKAGING AND STORAGE

- Available in 500 g and 10 kg
- Store in a cool dry place
- To be used once opened

Distributed by:

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.















