

LALVIN[®] ICV D254[™]



ORIGIN AND APPLICATION

Enhances mouthfeel due to the production of polysaccharides. For the production of Mediterranean-style red and white wines.

Isolated in 1997 from Shiraz fermentations in a Costieres de Nimes area winery, Rhone Valley, by the Institut Cooperatif du Vin (ICV). This yeast was selected after the screening of 3000 isolates, of which 450 were trialled for their oenological properties. **Lalvin ICV D254[™]** was selected.

In red wines, **Lalvin ICV D254[™]** contributes medium intensity lifted fruit aromas, often described as prune, blackberry, lifted balsamic characters and licorice. Spiciness on the finish characterises this yeast. The palate structure is described as high fore-mouth volume, big mid palate with smooth tannins with a long finish. Extraction of anthocyanins and tannins is high.

Lalvin ICV D254[™] is also used in Chardonnays where it tends to contribute butterscotch, butter, cream, smoke or nut characters. Lallemmand recommends to use this as a blending portion, the other portion fermented with Lalvin D47[™]. This will result in a wine with good fruit expression, good palate with exceptional complexity.

This yeast is a high producer of polysaccharides, hence contributes to a round mouthfeel and good palate weight.

To help mask vegetative characteristics in red wines, especially in circumstances where fruit has been picked before optimal ripeness, it is suggested to ferment a portion of wine (25-50%) with **Lalvin ICV D254[™]** and the other portion with ICV GRE[®].




The Lalvin ICV D254 yeast, was selected from nature, and has since been improved using the Lallemmand proprietary process called YSEO[®].



Lallemmand has developed a unique yeast production process called YSEO[®] (Yeast Security and Sensory Optimization). This process increases fermentation reliability and security and ensures fewer organoleptic deviations, but not all yeast can be prepared by this process. The process (when compared to non YSEO[®]):

- Improves the yeast cells assimilation of essential micronutrients and vitamins.
- Improves the yeasts ability to implant in the must for a more reliable fermentation.
- Linked to a reduction in yeast stress thereby reducing H₂S, VA and SO₂ production.
- Shorter lag phase.
- Improves the resistance and adaption of the yeast under difficult fermentation conditions.

MICROBIAL AND OENOLOGICAL PROPERTIES

- Recommended for white and red wine production.   
- *Saccharomyces cerevisiae* var. *cerevisiae*
- Desirable fermentation temperature: 12-28°C (53-82°F) (Australian observations).
- Alcohol tolerance 16% v/v *subject to fermentation conditions, when the ferment is aerated and the temperature maintained below 28°C (82°F)
- Medium relative nitrogen demand (under controlled laboratory conditions)

MICROBIAL AND OENOLOGICAL PROPERTIES (cont'd)

- Short lag phase and moderate fermentation vigour.
- Low production of H₂S under low YAN conditions.
- Low relative potential for SO₂ production.
- Very malolactic-bacteria compatible
- Competitive factor neutral.
- Very low foam producer.
- Suggested varieties include Cabernet Sauvignon, Pinot Noir and Shiraz. Also used for Chardonnay (barrel fermentation recommended).

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.

INSTRUCTION FOR USE

Dosage Rate:

- 25g/hL (2lb/1000gal) of Active Dried Yeast (this will provide an initial cell population of approximately 5 x10⁶ viable cells/mL)
- 30g/hL (2.4lb/1000gal) of Go-Ferm Protect Evolution™
- Nitrogen source from the Fermaid™ range

Procedure for 1000L (264gal) ferment.

- 1) Add 300g (10.6oz) of Go-Ferm Protect Evolution™ to 6L (1.5gal) of 40-43°C (104-110°F) 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 (95-104°F), sprinkle 250g (8.8oz) 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 (9-18°F) 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 (18°F).
- It is recommended that juice / must be inoculated no lower than 18°C (64°F).
- It is recommended to use complex nutrition source such as **Fermaid®**.

PACKAGING AND STORAGE

All Active Dried Yeast should be stored dry, best practice between 4-12°C (39-54°F) and the vacuum packaging should remain intact.

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