LALVIN® ICV D47™

YSEO® PROCESS
Yeast Security Optimization

ORIGIN AND APPLICATION

A high polysaccharide producer known for its accentuated fruit and volume. Ideal for barrel fermentation of white wines.

Lalvin ICV D47™ was isolated from must in the Côtes du Rhône region in France by ICV, Montpellier. ***Lalvin ICV D47™*** was selected from 450 isolates collected between 1986-1990.

The sensory profile of wines made with ***Lalvin ICV D47™*** demonstrate an enhanced aroma and flavour. This can be partially attributed to high β-glucosidase activity. It tends to allow the expression of good levels of terpenes, including citronellol, nerol and geraniol.

Due to the release of polysaccharides into the must during fermentation, this yeast contributes to a round, soft palate with good weight. This process can also result in the stability of aromatic compounds.

Highly recommended for the production of premium, barrel fermented Chardonnay. When left on lees spicy, tropical, citrus notes develop and the wine is said to have a silky persistence.

Lalvin ICV D47™ yeast was selected from nature and has since been improved using the Lallemand proprietary process call YSEO.

Lallemand 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 H_2S, VA and SO_2 production.
- Shorter lag phase.
- Improves the resistance and adaption of the yeast under difficult fermentation conditions.

MICROBIAL AND OENOLOGICAL PROPERTIES

- Recommended for white and rosé red wine production. Highly recommended for barrel fermentation
- *Saccharomyces cerevisiae* var. *cerevisiae*
- High dominance when inoculated into must containing high numbers of wild strains of *Saccharomyces cerevisiae.*
- Desirable fermentation temperature: 15-30°C (59-86°F). It is recommended to start the ferment at 17°C (62°F) or higher. This yeast is sensitive to low temperatures <15°C (59°F) in clarified juices.
- Alcohol tolerance 15% v/v **subject to fermentation conditions.*
- Low relative nitrogen demand (under controlled laboratory conditions)
- Short lag phase and moderate fermentation vigour.
- Very low production of H_2S under low YAN conditions.
- Low-moderate production of SO_2

MICROBIAL AND OENOLOGICAL PROPERTIES (cont'd)

- Very malolactic-bacteria compatible
- Competitive factor active.
- Low foam producer.

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 x10^6 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.

The information herein is true and accurate to the best of our knowledge; however, this data sheet is not to be considered as a guarantee, expressed or implied, or as a condition of sale of this product.

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