ICV D21™

ORIGIN AND APPLICATION

Suited to the fermentation of warm to hot climate fruit, low in acidity.
Contributes an intense fore-mouth, mid-palate tannin structure.
High colour stability of the wine is also observed.

**Lalvin ICV D21™** was isolated in 1999 from Pic Saint Loup Languedoc “Terroir”, during the ICV’s Natural Microflora Observatory and Conservatory program. **Lalvin ICV D21™** was selected for its ability to ferment wines high in colour stability and palate structure. Unlike most wine yeast, **Lalvin ICV D21™** contributes to higher acidity sensations, giving liveliness to wines.

It also releases polyphenol reactive polysaccharides. The strong interactions of these polysaccharides with the floral and fruity volatile compounds (β-ionone, ethyl hexanoate) contributes to a more stable aromatic profile. The polysaccharides also contribute to a round palate and mid-palate intensity. These attributes tend to reduce the expression of cooked jam characters in highly mature and concentrated wines from Cabernet Sauvignon, Merlot or Shiraz.

This yeast can also reduce the expression of herbaceous characters, particularly in Cabernet Sauvignon. When blended with wines fermented with ICV D80™ and Lalvin ICV D254™, **Lalvin ICV D21™** brings fresher forward fruit sensations, with length and an intensity of flavour to the blended wine.

The fermentation kinetics of **Lalvin ICV D21™** are very strong, even in the presence of low nutrient status and high temperatures.

This yeast can also be used in ripe white grapes / barrel fermentation where the development of fresh fruit aromas, acidity and volume are desired.

MICROBIAL AND OENOLOGICAL PROPERTIES

- Recommended for white, rosé and red wine production.
- *Saccharomyces cerevisiae* var. *cerevisiae*.
- Desirable fermentation temperature: 16-30°C (60-86°F).
- Alcohol tolerance 16% v/v *subject to fermentation conditions*.
- Low relative nitrogen demand (under controlled laboratory conditions)
- Short lag phase and moderate fermentation vigour.
- Low production of H₂S under low YAN conditions.
- Moderate relative potential for SO₂ production. Generally considered to be neutral to MLF.
- Competitive factor active.
- Low foam producer.
- Suggested varieties include Cabernet Sauvignon, Merlot, Shiraz, Barbera and Nebbiolo.
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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