LALVIN ICV OPALE 2.0™

YSEO PROCESS
Yeast Security Optimization

ORIGIN AND APPLICATION

For thiolic style rosé and white wines with citrus and exotic notes

The selection of ***Lalvin ICV Opale 2.0™*** was largely made possible through a collaborative study between the ICV Group, Lallemand oenology, SupAgro and INRA Montpellier. This study, using the QTL technique (Quantitative Trait Loci), was used during the thesis: Identification of the molecular basis of technological properties of wine yeast (Jessica Noble, Advisor: Bruno Blondin, 2011). This work resulted in a patent application filed by INRA and Montpellier SupAgro: «*Method of control on the production of sulfites, hydrogen sulfur and acetaldehyde by yeast (Variants MET2 / SKP2)*». This approach has enabled the development of an innovative selection technique for yeast which produces low levels of SO_2, H_2S and acetaldehyde.

Lalvin ICV Opale 2.0™ exhibits a special ability to produce very low level of H_2S and SO_2. Moreover, the final level of acetaldehyde fermented with ***Lalvin ICV Opale 2.0™*** will be a good asset to stabilize most wines with moderate SO_2 level. ***Lalvin ICV Opale 2.0™*** is a good alternative to other selected wine yeast to obtain more freshness in wine it contributes to exotic, tropical and citrus fruit intensity.

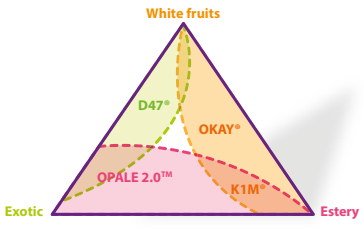
Lallemand has developed a unique yeast production process called YSEO® (Yeast Security and Sensory Optimization). This process increases fermentation reliability and security and ensures fewer organoleptic deviations, but not all yeast can be prepared by this process. The process (when compared to non 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 rosé and white wine
- *Saccharomyces cerevisiae*
- Killer Factor Active
- Alcohol tolerance: <14 % v/v
- Low Nitrogen demand
- Temperature: 12 to 28 °C
- Reliable fermenter in highly clarified juice
- Very low production of vinylphenol (POF-)
- Short lag phase and moderate fermentation vigor
- Very low potential for H2S and SO_2 production
- Low foam producer
- Low acetaldehyde producer

Aromatic profile



Chardonnay direct press - Static cold clarification

13.4% vol. - pH 3.35, malic 2.6 g/L - FAN 245 mg/L

PACKAGING AND STORAGE

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

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INSTRUCTION FOR USE

Dosage Rate:

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

Procedure for 1000L ferment.

1) Add 300g of Go-Ferm Protect Evolution™ to 5L 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 250g of yeast slowly and evenly onto the surface of the water, while gently stirring. Ensure any clumps are dispersed.
3) Allow to stand for 20 minutes before further gently mixing.
4) Mix the **suspended** 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.

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.
- 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 A™** or **Fermaid O™**.

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