



QA23[®]

YSEO[™]
PROCESS
Research in collaboration
with Washington State University

ORIGIN AND APPLICATION

For fresh, fruit focused whites – A clean fermenter, rated highly in thiol conversion for optimum varietal expression. High in β -glucosidases to help aromatic expression. Also used for fruit wine and cider production.

Selected in Portugal from the area of the appellation of Vinhos Verdes by the University of Trás os Montes e Alto Douro (UTAD) in co-operation with the Viticultural Commission of the Region Vinhos Verdes.

Lalvin QA23[®] has a very high β -glucosidase activity, enzymes which cleaves non-volatile aromatic compounds into their volatile state. Hence this yeast contributes to varietal / terroir fruit expression.

It is known to enhance citrus fruit type aromas including lime and grapefruit. Given many terpenes are bound to glucosides, the use of **Lalvin QA23[®]** in varieties high in terpenes such as Riesling is highly recommended.

This yeast is also a proven thiol converter, hence excellent thiol expression is achieved. Highly recommended for use in Sauvignon Blanc.

A very reliable, clean fermenter, **Lalvin QA23[®]** respects varietal fruit character, with minimal yeast flavour contribution. Depending on the terroir, some ester production has been reported.

Known for its reliability and robustness, **Lalvin QA23[®]** tends to ferment well in clarified juice, low in nutrients. In addition, its ability to ferment at relatively low temperatures makes it an ideal choice for the making of many white wines. It is a fructophilic yeast, hence it tends to ferment well at the end of fermentation.

The **Lalvin QA23[®]** is one of the leading Riesling yeast in Australia, where it produces elegant, well structured, cool climate Rieslings.

The **Lalvin QA23[®]** yeast, was selected from nature, and has since been improved using the Lallemand proprietary process called YSEO[®].



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.

Lallemand FOCUS paper: Yeast options for fruit wine and cider making.

YSEO[™] signifies Yeast Security and Sensory Optimization, a unique Lallemand yeast production process to meet demanding fermentation conditions. While not all yeast benefit from this process, YSEO[™] improves the reliability of alcoholic fermentation by improving yeast quality and performance and reduces the risk of organoleptic deviation even under difficult conditions. YSEO[™] yeasts are 100% natural and non-GMO.



MICROBIAL AND OENOLOGICAL PROPERTIES

- Recommended for white wine production.
- *Saccharomyces cerevisiae* var. *cerevisiae*
- Desirable fermentation temperature: 14-28°C. Can ferment at 10°C, once the fermentation has started. **subject to fermentation conditions.*
- Alcohol tolerance 16% v/v **subject to fermentation conditions.*
- Low relative nitrogen demand (under controlled laboratory conditions) and can ferment under low nutrient conditions such as low turbidity juices.
- Average lag phase and high fermentation vigour.
- Very low production of H₂S under low YAN conditions.
- Moderate relative potential for SO₂ production.
- Killer factor active.
- Low foam producer.
- Suggested varieties include: Chardonnay, Chenin Blanc, Colombard, Gewürztraminer, Muscadelle, Pinot Grigio, Pinot Gris, Riesling, Sauvignon Blanc, Semillon and Viognier.

INSTRUCTION FOR USE

Dosage Rate:

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

Procedure for 1000L ferment.

- 1) Add 300g of Go-Ferm Protect® / 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, 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 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 AT™** or **Fermaid O™**.

PACKAGING AND STORAGE

- All Active Dried Yeast should be stored dry, best practice between 4-12°C 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.



WINE
YEASTS



WINE
BACTERIA



NUTRIENTS
/PROTECTORS



SPECIFIC
INACTIVATED YEASTS



ENZYMES



CHITOSAN



VINEYARD
SOLUTIONS



LALLEMAND OENOLOGY

Original by culture