LALVIN sensy™

YSEO® PROCESS
Yeast Security Optimization

ORIGIN AND APPLICATION

A new generation of wine yeast that gives the freedom to express the sensory potential of varietal white wine.

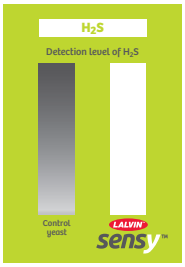
The selection of ***Lalvin Sensy™*** was largely made possible through a collaborative study between the ICV Group, Lallemand oenology, SupAgro and INRA Montpellier. This study, using the QTL technique (Quantitative Trait Loci), was used during the thesis: Identification of the molecular basis of technological 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.

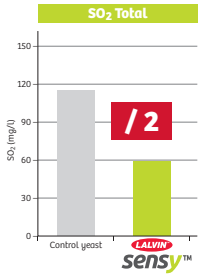
H_2S confers negative aroma attributes to wine. It can be considered as a real issue especially for varietal white wine, as it generates unacceptable quality loses and masks aroma flavor. ***Lalvin Sensy™*** will produce no or very little H_2S which is a great advantage to express varietal aroma from white grape varieties.

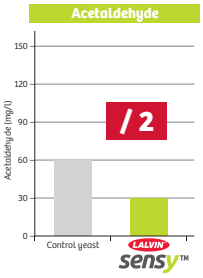
The low acetaldehyde productions by ***Lalvin Sensy™*** will be a good asset to stabilize wines through moderates SO_2 use.

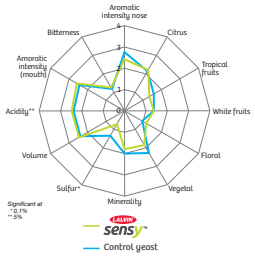
Lalvin Sensy™ combines all the assets of a yeast needed to conduct fermentation in white varieties. It produces a moderate level of fermentative aroma and very low level of H_2S, respecting the varietal aromas of the grape variety.

Lalvin Sensy™ gives more open wines whereas wine fermented with other yeast show more reductive notes and. has the capacity to enhance mouthfeel structure.









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 wine production.
- *Saccharomyces cerevisiae* var. *cerevisiae*
- Very good implantation
- Very short lag phase
- Complete to regular fermentation rate
- Alcohol resistance: up to 15%
- Temperature tolerance: 12-18°C (54-64°F)
- Low requirement for assimilable nitrogen
- Low H_2S whatever fermentation environmental
- conditions
- Very low SO_2 production
- Low volatile acidity production (< 0.35 g/L)
- Low acetaldehyde production
- Contributes to enhance varietal aroma
- Very good mouthfeel

The selection of these yeasts 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 Locus), 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 MET_2 / SKP_2) «This approach has enabled the development of an innovative selection technique for yeast which produces low levels of $S0_2$, H_2S and acetaldehyde.»

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.

May 2017