

VELLUTO EVOLUTION™

YSEO™
 PROCESS
 Research in collaboration
 with Washington State University

ORIGIN AND APPLICATION

A yeast that produces high levels of glycerol, ideal for voluptuous fine wines.

Selected in Spain by MURVIEDRO (Schenk wineries) in collaboration with IATA CSIC (Consejo Superior de Investigaciones Científicas). **Velluto Evolution™** has demonstrated that it produces high levels of glycerol in all the trials conducted worldwide.

The high production of glycerol results in wines with more roundness and a soft mid-palate. It also produces secondary metabolites such as ethyl hexanoate, ethyl decanoate and phenyl ethanol which confer floral and fruity notes to wines. Sensory descriptors such as balsamic notes have also been used in wines fermented with **Velluto Evolution™**.

The **Velluto Evolution™** yeast, was selected from nature, and has since been improved using the Lallemant proprietary process called YSEO®.



MICROBIAL AND OENOLOGICAL PROPERTIES

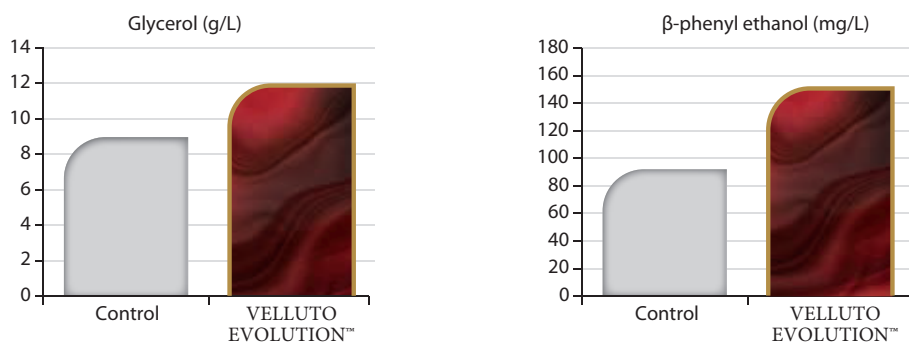
- Recommended for red wine production.
- Hybrid of *Saccharomyces cerevisiae / uvarum*
- Good tolerance of low temperatures (>12°C*). Desirable fermentation temperature is between 24-26°C subject to fermentation conditions.
- Alcohol tolerance to 15% v/v *subject to fermentation conditions.
- Medium - high relative nitrogen demand (under controlled laboratory conditions)
- Short lag phase and moderate fermentation vigour.
- Low relative potential for SO₂ production.
- High glycerol production.
- Killer factor active.
- Generally considered to be MLF friendly. Co-inoculation with lactic acid bacteria (shortly after yeast inoculation) or sequential inoculation is possible.
- Suggest red varieties include Cabernet Sauvignon, Cabernet Franc, Grenache, Shiraz, Tempranillo, Merlot and Pinot Noir.

YSEO™ signifies Yeast Security and Sensory Optimization, a unique Lallemant 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 (cont'd)

High glycerol production by Velluto Evolution™ helps to make full body red wines with an interesting soft and mid palate. This wine yeast differentiates itself with an interesting secondary metabolism, usually producing significant amounts of ethyl hexanoate, ethyl decanoate and phenyl ethanol which confer floral and fruity notes to the wine.

Tempranillo - La Rioja - Spain - Red wine for aging 14,5% Alcohol vol.



INSTRUCTION FOR USE

Dosage Rate:

- 25g/hL of Active Dried Yeast (this will provide an initial cell population of approximately 5×10^6 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