

# ENOFORM<sup>®</sup> CSM<sup>™</sup>



## ORIGIN AND APPLICATION

**Bordeaux selection for stylish elegant reds. Favours extraction of soft tannins and retains colour.**

**Enoferm CSM<sup>™</sup>** was isolated from Bordeaux for Cabernet Sauvignon, Cabernet Franc and Merlot. The yeast was selected by the Institut Francais de la Vigne et du vin (formerly ITV) Bordeaux, in cooperation with the Conseil Interprofessionnel du Vin de Bordeaux.

**Enoferm CSM<sup>™</sup>** favours colour extraction and phenolic extraction. The resulting phenolics tend to be smooth, round and elegant. The yeast promotes intense aromatic profiles, predominately of berries, spices and licorice. In cooler climate Cabernets (or fruit that has been picked before optimal flavour maturity) CSM<sup>™</sup> can help reduce the expression (mask) vegetal aromas and flavours, hence promoting varietal fruit expression.

**Enoferm CSM<sup>™</sup>** does have a high nutrient demand hence benefits from balanced nutrient additions, such as the use of a Go-Ferm Protect Evolution<sup>™</sup> during yeast rehydration and complex fermentation nutrient such as a Fermaid<sup>®</sup> product. Also note the low alcohol tolerance of 14% v/v, hence, it is well suited to cooler climate red varietals or those picked early.

**Enoferm CSM<sup>™</sup>** yeast, was selected from nature, and has since been improved using the Lallemand proprietary process called YSEO<sup>®</sup>.



Lallemand has developed a unique yeast production process called YSEO<sup>®</sup> (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<sup>®</sup>):

- 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<sub>2</sub>S, VA and SO<sub>2</sub> production.
- Shorter lag phase.
- Improves the resistance and adaption of the yeast under difficult fermentation conditions.

## MICROBIAL AND OENOLOGICAL PROPERTIES

- Recommended for red wine production. ○ ○ ●
- *Saccharomyces cerevisiae* var. *cerevisiae*
- Fermentation temperature limits 15-32°C (59-89°F)
- Moderate fermentation vigour and short lag phase.
- Medium relative nitrogen demand (under controlled laboratory conditions)
- Tends to produce hydrogen sulfide at low YAN's so adequate fermentation nutrition is recommended.
- Alcohol tolerance 14% v/v \*subject to fermentation conditions.
- Low-medium relative potential for SO<sub>2</sub> production.

## MICROBIAL AND OENOLOGICAL PROPERTIES (cont'd)

- Competitive factor active.
- Moderate foam producer.
- Suggested varieties – Cabernet Sauvignon, Cabernet Franc, Merlot and Shiraz

## FURTHER READING

*Please request this information 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.

## INSTRUCTION FOR USE

### Dosage Rate:

- 25g/hL (2lb/1000gal) of Active Dried Yeast (this will provide an initial cell population of approximately  $5 \times 10^6$  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

Pack size is 500 g. 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.*