

uvaferm®

GHM™

YSEO™
PROCESS
Research in collaboration
with Washington State University

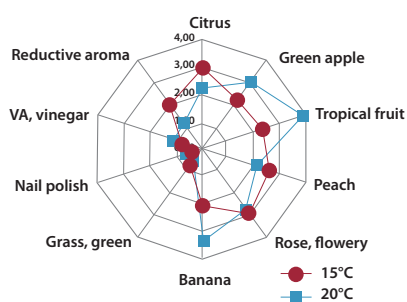
ORIGIN AND APPLICATION

A yeast recommended for cool climate aromatic whites.

Uvaferm GHM™ was isolated by a team led by Dr Manfred Grossmann, professor at the Geisenheim Research centre, Section Microbiology and Biochemistry, Germany.

Numerous trials with **Uvaferm GHM™** in Riesling and other cool climate aromatic white

varietals resulted in consistently harmonious and well balanced wines. This yeast has the ability to enhance floral aromas, whilst avoiding strong ester production. It brings harmony between bouquet and the delicate fruit aromas as well as maintaining a refined acidity, important in such varieties as Riesling. **Uvaferm GHM™** is particularly suited for white wines destined for extended lees contact. The spider graph demonstrates the impact on flavour when using this yeast at two different fermentation temperatures.



Impact factors on fermentation flavour



The **Uvaferm GHM™** yeast, was selected from nature, and has since been improved using the Lallemand proprietary process called YSEO®.

MICROBIAL AND OENOLOGICAL PROPERTIES

- Recommended for white wine production.
- *Saccharomyces cerevisiae var. cerevisiae*
- Desirable fermentation temperature: 16-20°C. *subject to fermentation conditions.
- Alcohol tolerance 14% v/v *subject to fermentation conditions.
- Medium-high relative nitrogen demand (under controlled laboratory conditions)
- Short lag phase and moderate fermentation vigour.
- Low production of volatile acidity.
- Low production of H₂S under low YAN conditions.
- Low relative potential for SO₂ production.
- Killer factor sensitive.
- Considered to be MLF friendly.

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.

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.

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