



hop™

Saccharomyces cerevisiae

The first wine active dry yeast specifically selected for direct inoculation

DESCRIPTION

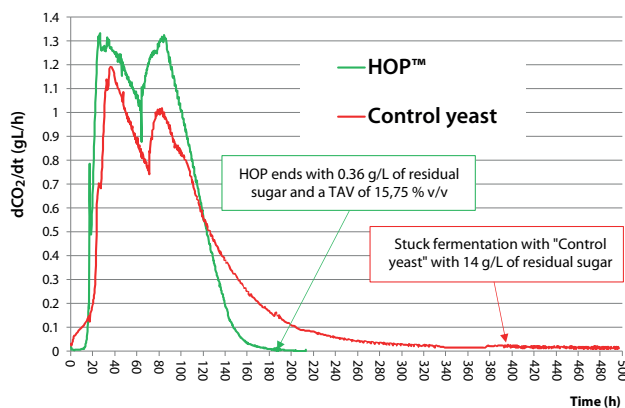
HOP™ has been selected in collaboration with INRAE (Institut National de Recherche pour l'Agriculture, l'alimentation et l'Environnement) in the frame of an European Marie-Curie ITN project called "YEASTCELL". The main objective of this research program was to understand and improve yeast stress resistance when inoculating it in a juice or must without prior rehydration. Through an innovative and non-GMO method of selection based on evolutionary adaptation simulating challenging and stressful winemaking conditions, HOP™ acquired a unique genetic background that offers a reinforced cell wall structure and a multi-stress resistance profile. This extra membrane integrity allows HOP™ to endure difficult conditions right from inoculation until the end of fermentation, while maintaining a typical high vitality.

Reference: Ferreira D. (2017) *Stress resistance during the lag phase of wine fermentation and development of optimized yeasts*. PhD Thesis, École Doctorale GAIA, Montpellier.



BENEFITS & RESULTS

Kinetics of alcoholic fermentation
HOP™ and "Control yeast" were both added directly
without prior rehydration in the must during tank filling at 25g/hL



Comparative trial done in Carignan (Languedoc, France).
Initial sugar = 267g/L; pH = 3.46; YAN=110mg/L;
Temperature at inoculation = 22°C;
Temperature during alcoholic fermentation = 28°C

- This original and innovative selection approach makes HOP™ the first wine active dry yeast specifically selected for direct inoculation into a juice or must without losing any of its features and performance.
- Multi-stress resistance:
 - Osmotic stress
 - High initial molecular SO₂ level
 - Low turbidity
 - Low and high temperature
 - High ethanol
- Specifically selected for direct inoculation without prior rehydration in a very wide and challenging range of winemaking conditions.
- Intrinsic capacity to offset the effects of non-rehydration thanks to an original and unique selection method: when science brings simplicity with no compromise on performance.

YSEO™
PROCESS
Research in collaboration
with Washington State University

YSEO™ signifies Yeast Security and Sensory Optimization™, a unique Lallemand yeast production process to help overcome demanding fermentation conditions.

YSEO™ improves the reliability of alcoholic fermentation by improving yeast quality and performance and reduces the risk of sensory deviation even under difficult conditions. YSEO™ yeasts are 100% natural and non-GMO.



PROPERTIES

- *Saccharomyces cerevisiae Gal-* (ex var. *bayanus*)
- Very robust - strong fermentative capacity
- High vitality
- Short to medium lag phase
- High resistance to SO₂
- Alcohol tolerance 16% v/v
- Wide temperature range: 14 to 30°C (57 to 86°F)
- Low volatile acidity production
- Low to medium relative nitrogen demand
- Fructophilic character

INSTRUCTIONS FOR OENOLOGICAL USE

Dosage rate: 20 to 40 g/hL

Specifically selected for direct inoculation.

Add the yeast directly on the top of the tank or preferably during tank filling.

Or pour the yeast in 10 times its weight in tap water/juice/must, suspend by gentle stirring and add to the must/juice to inoculate with a pump over assuring a good yeast distribution.

PACKAGING AND STORAGE

- Available in 500g and in 10kg
- Store in a cool dry place
- To be used once opened

Distributed by:

The information in this document is correct to the best of our knowledge. However, this data sheet should not be considered to be an express guarantee, nor does it have implications as to the sales condition of this product. April 2022.



WINE
YEASTS



WINE
BACTERIA



NUTRIENTS
/PROTECTORS



SPECIFIC
YEAST DERIVATIVES



ENZYMES



CHITOSAN



VINEYARD
SOLUTIONS

LALLEMAND

LALLEMAND OENOLOGY

Original **by culture**

www.lallemantwine.com

Visionary biological solutions - Being original is key to your success. At Lallemant Oenology, we apply our passion for innovation, maximize our skill in production and share our expertise, to select and develop natural microbiological solutions. Dedicated to the individuality of your wine, we support your originality, we cultivate our own.