



# LALLZYME STABPRO™

## High performance acid protease for removing haze-forming proteins in must and wine

### DESCRIPTION

LALLZYME STABPRO™ is a liquid enzyme preparation, obtained from *Aspergillus niger*, for white and rosé must and wine haze-forming protein stabilization. It can also be applied in sparkling wine production.

It contains aspergillopepsin 1, which is an acid protease active on proteins responsible for haze in wine.



### BENEFITS & RESULTS

The most abundant classes of haze-forming proteins are thaumatin-like proteins (TLPs) and chitinases, which belong to the Pathogenesis-related (PR) proteins. These proteins are produced by the plant in response to abiotic and biotic stress as protection to plant damage.

LALLZYME STABPRO™ is active on both classes of proteins by denaturing their molecule. A short heat treatment (1-2 min at 65-75°C), just after the addition of the enzyme, allows the unfolding of the haze-forming proteins.

LALLZYME STABPRO™ can then easily have access to the unfolded molecules and irreversibly cleave them. After the degradation of the structure, the proteins are no longer able to flocculate, and the wine remains stable.

For more details of application, refers to OIV recommendations: Res. OIV-OENO 541A-2021 and Res. OIV-OENO 541B-2021.

- PROPERTIES**
- Fast and complete degradation of haze-forming proteins.
  - Replacement of bentonite treatment, with less impact on wine quality and no product loss.
  - Possibility to use it in must or in wine.

## INSTRUCTIONS FOR OENOLOGICAL USE

**Dosage:** 5-8 ml/hL for standard conditions.

8-10 ml/hL for high haze-forming protein content.

Add LALLZYME STABPRO™ in must, before or after the clarification step. Add the enzyme just before the heating step.

Add LALLZYME STABPRO™ in wine just before the heating step.

After the heating treatment, cool the must/wine to the normal temperature.

For a better mixing, suspend the enzyme preparation in 10 times the volume with must or in wine. The combined addition of 3-5 g/hl of LALLZYME THERMO™ during the must treatment allows a complete and efficient depectinization of the must.

### + NOTES

The enzyme activity is not affected by normal SO<sub>2</sub> additions.

Since LALLZYME STABPRO™ is a protein, do not use bentonite during enzyme treatment.

A protein stability test is suggested at the end of the treatment and before the bottling.

If mannoproteins, CMC (carboxymethylcellulose) or other colloidal products are added during the wine making process, it is strongly recommended to confirm the protein stability before bottling.

A filtration must be performed to remove the residual proteins.

## PACKAGING AND STORAGE

- 1 kg plastic bottles.
- Store LALLZYME STABPRO™ in a cool and dry place, preferably between 4 and 8°C (39-46°F), in the original sealed packaging.

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

LALLZYME STABPRO™ is a Lallemand recipe, formulated based on the results of research and trials performed by Lallemand and its research institute partners, in compliance with the most complete current legislation.



WINE  
YEASTS



WINE  
BACTERIA



NUTRIENTS  
/PROTECTORS



SPECIFIC  
YEAST DERIVATIVES



ENZYMES



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