

## Enzymes

# Zyme-O-Stab

### Description

New protease for white winemaking. Insolubilisation of grape proteins and haze formation after bottling is a frequent problem in white winemaking. Until now, grape proteins were resistant to proteolysis, and the problem was solved removing the excess of proteins with bentonite, inducing wine losses and waste to discard. It has been demonstrated that the folded conformation of grape proteins and protease specificity were the reasons why the enzymatic treatment failed.

*Zyme-O-Stab* is a new acid protease from a selected strain of *Aspergillus niger* used to prevent protein haze in white wines. *Zyme-O-Stab* can be used in white winemaking for protein hydrolysis in the white must, instead of bentonite treatment. Because grape proteins are folded and thus resistant to proteolysis, it is necessary to flash pasteurize the must first, to unfold proteins that become then sensitive to protease hydrolysis. *Zyme-O-Stab* has been specially developed to obtain very good white wine clarity, without protein haze formation after bottling.

### Properties

*Zyme-O-Stab* with an activity of approximately 5000 APU/g has shown to best perform when applied under the following directions of use.

### Directions for use

After depectinisation, flash pasteurisation of white must (1minute at 158°F) or added after thermic treatment of red grapes. Ensure to add *Zyme-O-Stab* when juice temperature is below 150°F. Use diluted in must and mixed for good homogenisation in the tank

### Dosage

From 10 to 40 ml/Ton.

### Recommendation and shelf life

Store in original package and carefully close the container in case of remaining product. Store in refrigerator between 39-46° F

### Regulations

*Zyme-O-Stab* is manufactured to comply with current purity specifications of JECFA (FAO/WHO) and conforms to FCC's recommended specifications for food enzymes. These specifications also encompass heavy metals as well as the microbiological characteristics. *Zyme-O-Stab* is GRAS and TTB approved.