



NATUZYM[®] APW

Technical Data Sheet

Date of issue: 9 Feb. 2011 | Printing date: 23 Feb. 15 | Page 1 of 1

New acid protease for white winemaking

Description:

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.

NATUZYM[®] APW is a new acid protease from a selected strain of *Aspergillus niger* used to prevent protein haze in white wines. NATUZYM[®] APW 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.

NATUZYM[®] APW has been specially developed to obtain a very good white wine clarity, without protein insolubilisation after bottling.

Purity; regulatory aspects:

NATUZYM[®] APW 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. NATUZYM[®] APW is GRAS in the USA.

Utilisation:

NATUZYM[®] APW with an activity of approximately 5000 APU/g has shown to best perform when used under the following conditions :

Application & recommendations	Dosage
- After depectinisation, flash pasteurisation of the white must (1 minute at 70°C) - Addition of NATUZYM [®] APW diluted 10 times into the must (below 65°C) and mixing for homogenisation in the tank	3-4 g/hl

Packaging and storage:

NATUZYM[®] APW is available in 25 kg polyethylene drums or in 1000 kg IBC's. The product is best stored in the original packaging under refrigerated conditions at 4–8°C in order to retain maximum activity during storage.

Safety aspects and caution:

Enzyme products need to be handled with care. Please consult the separately available Material Safety Data Sheet for further information.

NATUZYM[®] APW cannot be used in E.C.

Product for food use, for professional and oenological use only. Not for retail sale; for professional use only, according to current legislation.

To the best of our knowledge, the information presented is accurate and complete. However, nothing herein contained shall be construed to imply any warranty or guarantee.