

# PVPP

## POLYVINYL POLYPYRROLIDONE (E1202)

### SOFTENING OF RED WINES PREVENTIVE AND CURATIVE TREATMENT OF MADERIZATION OF WHITE WINES

#### CHARACTERISTICS

- ◆ **PVPP** is a white, light, fine powder, that is insoluble in water, in aqueous alcohol and in organic solvents.
- ◆ **PVPP** is obtained by the polymerisation of vinylpyrrolidone. The final product is a network of macromolecules.
- ◆ **PVPP** is totally insoluble and leaves no residue in wines.
- ◆ **PVPP** acts by adsorption:  
The amide bonds of **PVPP** form hydrogen bonds with the hydroxyl groups of polyphenols.

The product proposed by **MARTIN VIALATTE OENOLOGIE** complies with the Annex I of Regulation 2008/84/CE.

- Moisture .....	< 5%	- Heavy metals .....	< 10 ppm
- Ash .....	< 0.1%	- Total nitrogen .....	between 11 and 12.8%
- Arsenic .....	< 2 ppm	- Soluble matter .....	< 1.5%

**PVPP** is used in :

#### ◆ **The treatment of madeirization and browning of white wines :**

Phenolic compounds play an important role in the colour and taste of white wines, in particular during oxidation phenomena (phenol acids, catechins, leucoanthocyanins).

#### ◆ **Mellowing red wines :**

- Treatment with **PVPP** has little effect on anthocyanins and the colour of wine, but leads to a considerable reduction of tannins and lowers the phenol value.
  - **PVPP** preferentially binds astringent tannins.
  - Treatment with **PVPP** offers the following advantages:
    - A noticeable reduction in the optical density of the wine: wines are less yellow,
    - A reduction in catechins and leucoanthocyanins, responsible for browning a combination of free SO<sub>2</sub>.
    - For the senses, a reduction of bitterness and improved freshness and aroma.
- The specificity of the action of **PVPP** is a complement to that obtained by treating with casein and with bentonite.

## REGULATIONS

PVPP is authorized by the EU regulation to the amount of 80 g/hL.

## INSTRUCTIONS FOR USE

- ◆ It is recommended to treat the must or wine after eliminating the maximum number of impurities and micro-organisms, in order to avoid uselessly saturating the active sites of **PVPP**.
- ◆ The dosage for use varies from several grams depending on the sought after gustatory effect, to be pre-determined by taste tests.
- ◆ **PVPP** is used as a contact treatment in the vat.  
After suspending the product at 250 g per liter of wine for 30 minutes, the mixture is added to the wine during a pumping over. This incorporation is completed by homogenizing for 30 to 45 minutes by mixing or pumping over.  
It is not necessary to fine in order to eliminate the product after treatment, but it is useful to allow it to sediment for several hours before carrying out a filtration.
- ◆ **PVPP** is, also, used for filtration through earth, where it is added during silting at a maximal dose of 80 g/hL.

## PACKAGING

- ◆ 1 kg bag – carton of 5 x 1 kg
- ◆ 20 kg carton

## STORAGE

- ◆ Full original sealed packaging, store in a dry, odourless environment, out of the light.
- ◆ Once opened, use quickly.