



**Martin
Vialatte
Enologie**

PVPP

POLYVINYL POLYPYRROLIDONE

**SOFTENING OF RED WINES
PREVENTIVE AND CURATIVE TREATMENT OF
MADERIZATION OF WHITE WINE**

CHARACTERISTICS

- ◆ PVPP is a white, fine powder, insoluble in water, aqueous alcohol or organic solvents.
- ◆ PVPP is obtained by the polymerization 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.

This product complies with CE regulation No 1622/2000 V with the following specifications:

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

PVPP is used in:

- ◆ The treatment of maderization and browning of white wines:
Phenolic compounds play an important role in the color and taste of white wine, in particular during oxidation phenomena (phenol acids, catechins, and leucoanthocyanins).

Mellowing red wines:

- ◆ Treatment with PVPP has little effect on anthocyanins and the color 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, which are responsible for browning and binding of free SO₂.
 - Sensorially, a reduction of bitterness and improved freshness and aroma. This specificity of action of PVPP is a complement to that obtained by treating with casein and with bentonite.

PREPARATION & USE

- ◆ It is recommended to treat the must or wine with PVPP after eliminating impurities and microorganisms in order to avoid uselessly saturating the active sites of PVPP.
- ◆ The dosage for use varies from several grams depending on the gustatory effect sought, to be predetermined by prior lab trials and tasting.
- ◆ PVPP is used as a contact treatment in the tank. After suspending the product at a rate of 250g/L of wine for 30 minutes, the mixture is added to the wine during pumping over. Homogenizing for 30 to 45 minutes by mixing or pumping over completes this incorporation. It is not necessary to fine in order to eliminate the product after treatment, but it is useful to allow it to settle for several hours before carrying out filtration.
- ◆ PVPP is also used for filtration through earth, where it is added during silting at a maximal dose of 80 g/hL.

NOTES

- ◆ Legal limit for PVPP is authorized by the CE regulation No 1493/99 (annex IV) to the amount of 80 g/hL.
- ◆ In the United States, 21CFR173.50 states that the addition rate shall not exceed 60lbs/1000 gallons.

PACKAGING

1 kg bag	30-080-0001
500 g bag	30-080-0500

STORAGE

- ◆ Unopened original packaging: Store in a cool, dry and odor free environment away from light.
- ◆ Once opened, use rapidly.