

## MannoPLUS ND

Mannoprotein in 20% aqueous solution

### INFORMATION

**MannoPLUS ND** is a liquid purified mannoprotein ready for direct use in wine.

- » Contributes to the sensory characteristics of the wine, supplying density, richness and body.
- Refines aggressive tannins, reducing astringency. Minimize the excessive wood tannin.
- » Restores acid balance by increasing positive in-mouth sensations.
- » Improves tartaric stability by preventing tartaric acid salts from crystallizing.
- » Improves protein stability.
- » Better color stability, due to the formation of protective colloids and stable complexes with tannins.
- » In second fermentation: increased volume in the mouth and the persistence of foam.

Due to the organoleptic properties of mannoproteins, it provides smoothness and considerably increases the voluminous effect in the mouth.

**Rapid effect on volume sensation in the mouth. Does not add other aromatic notes to the wine.**

### APPLICATION

For white and red wines. Added to finished wine as the last treatment before bottling.

- » **In wines to be filtered:** Mannoplus ND must be added at least 24 hours before the last filtration. Mannoplus ND barely increases the clogging index of well prepared wines. Microfiltration is not needed after treatment.

*We recommend that the clogging index be measured before microfiltration of the wine.*

- » **In wines not to be filtered:** add Mannoplus ND 24 hours before bottling. Once the product is added to wine, it can be treated with sulfite and bottled.

- » **In sparkling wines:** Add with the expedition liqueur.

### COMPOSITION

- » Mannoprotein in 20% aqueous solution, citric acid monohydrate (E-330) and sulfur dioxide (E-220). (Contains sulfites: 2000-4000 ppm).



*Contribution of polysaccharide- and mannoprotein-based preparations to wine aromatic profile. Speed transfer of flavoring compounds, increase of volume and influence on stability.*

## DOSAGE

### Finished wine

*Red wine*      **25-75ml/hl**

*White wine*    **10-50 ml/hl**

**Sparkling wine**    **10-50 ml/hl**

## DIRECTIONS

1. It can be directly applied in the wine to be treated. To improve homogenization, it is recommended to dilute the product 2-4 times its volume.

2. Add to the total volume with dosing pump, if possible. Make sure to reach homogenization

### Sparkling wine:

Add to each bottle with the tirage liqueur, and disgorge as usual.

*The effect depends on the dose and wine characteristics.*

## PHYSICAL APPEARANCE

Amber liquid.

## PRESENTATION

0.5kg bottles.

## PHYSICOCHEMICAL PROPERTIES

EP 665 (rev.0)

Dry residue [%]	>20
Turbidity [NTU]	< 50
pH	2-4
SO <sub>2</sub>	2000- 2400
Heavy metals [mg/kg]*	< 30
Pb [mg/kg]*	< 5
Hg [mg/kg]*	< 0,15
As [mg/kg]*	< 1
Cd [mg/kg]*	< 0,5
Total Nitrogen [%]*	5- 75
Total mesophilic aerobic count [UFC/g]*	< 10 <sup>4</sup>
Total coliforms [UFC/g]*	< 10
<i>Staphylococcus aureus</i> [UFC/g]*	ABSENT
<i>Salmonella</i> [UFC/25g]*	ABSENT
<i>E. coli</i> [UFC/25g]*	ABSENT
Lactic bacteria [UFC/g]*	< 10 <sup>4</sup>

(\*) Referenced value to dry raw material.

## PRESERVATION

Store in the original packaging in a cool, dry and odorless place.

Once opened, it should be used as soon as possible.

Best before: within 2 years after bottling.

## RGSEAA: 31.00391/CR

*Product in compliance with the International Oenological Codex and Regulation (UE) 2019/934.*