

MANNOFEEL®

Specific yeast cell wall mannoprotein from *Saccharomyces cerevisiae* for the colloidal stabilisation of the wine.
 Qualified for the elaboration of products for direct human consumption in the field of the regulated use in oenology.
 In accordance with the current EU regulation n° 2019/934.

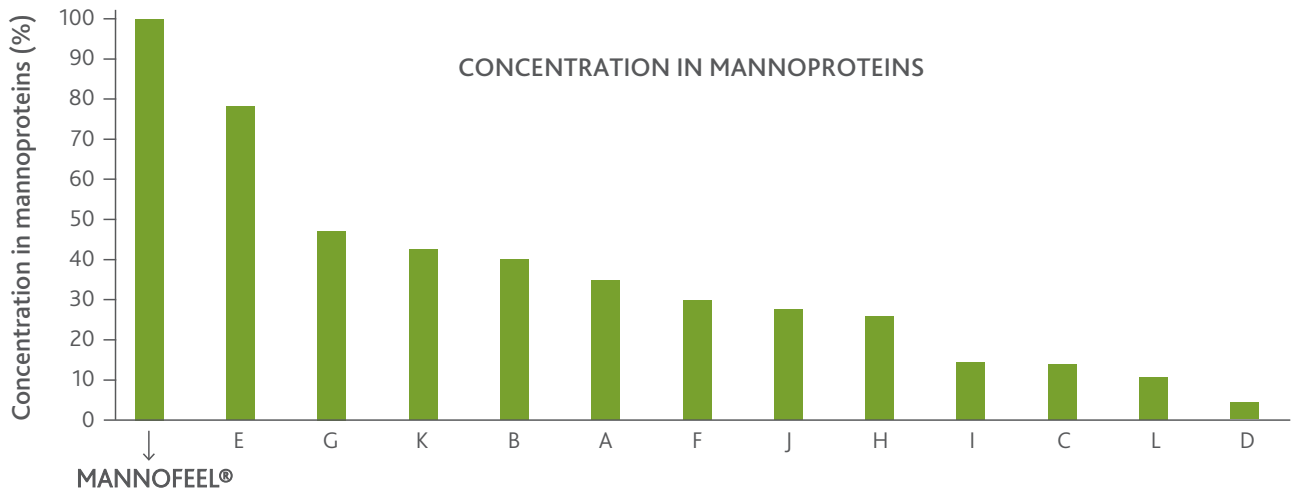
SPECIFICATIONS AND OENOLOGICAL APPLICATIONS

MANNOFEEL® is the result of **LAFFORT®** expertise on mannoproteins; their identification, the understanding of their action and their production. **MANNOFEEL®** mannoproteins are extracted from yeast cell walls by a specific process that allows us to obtain a highly purified product with the highest content of mannoproteins on the market.

- Component naturally present in wine.
- Product in liquid form, ready to use, with an immediate action on the wine.
- Contributes to the tartaric stabilisation of the wine.
- Excellent filterability; **MANNOFEEL®** has no impact on the wine's filterability.
- Contributes to the colloidal stabilisation of the wine.
- Can be used towards the end of ageing and during wine preparation for bottling.
- Respects the freshness and the fruit of the wine.

SCIENTIFIC RESULTS

Comparison of the mannoprotein concentration of different products of equivalent application standardised according to the most concentrated product at 100%.



PHYSICAL CHARACTERISTICS

Aspect liquid Density (g/L) 1080
 Colour dark brown Soluble in water (dark brown colour), insoluble in ethanol.



CHEMICAL AND MICROBIOLOGICAL ANALYSES

SO ₂ (g/L)	1.5 ± 0.3	Coliforms (CFU/g)	< 10
Dry content (%)	20 ± 0,5	<i>E. coli</i> (/25 g)	none
<u>Analysis on dry product:</u>			
Ashes (%)	< 8	<i>Staphylococcus</i> (/g)	none
Total nitrogen (g/kg)	[5 - 75]	<i>Salmonella</i> (/25 g)	none
Polysaccharides eq. mannose (g/kg)	> 600	Heavy metals (Pb) (ppm)	< 30
Yeast (CFU/g)	< 10 ²	Lead (ppm)	< 5
Mould (CFU/g)	< 50	Arsenic (ppm)	< 1
Lactic acid bacteria (CFU/g)	< 10 ⁴	Mercury (ppm)	< 0.15
Aerobic mesophile bacteria (CFU/g)	< 10 ⁴	Cadmium (ppm)	< 0.5

PROTOCOL FOR USE

OENOLOGICAL CONDITIONS

MANNOFEEL® is the last treatment before bottling (after blending, fining and pre-filtration, etc.). No treatment should be made post **MANNOFEEL®** application with the exception of SO₂, Gum Arabic and ascorbic acid.

In the case of filtered wines, **MANNOFEEL®** should be added between preparation filtration and bottling filtration and at least 48 hours prior to bottling. Filterability of the wine should be tested before and after addition of **MANNOFEEL®**.

IMPLEMENTATION

- Mix the **MANNOFEEL®** solution well.
- For still wines, incorporation should be completed before the membrane filtration with a dosing pump or an **OENODOSEUR** on wines already fined and clarified. Make sure the homogenization is perfect.
- We recommend incorporating **MANNOFEEL®** at least 48 hours before filtration.
- For sparkling wines, incorporation of **MANNOFEEL®** should be done either during tirage (less gushing risks) or during disgorging (in this case anticipate the filtration of the **MANNOFEEL®** solution) in the expedition liqueur.

STORAGE RECOMMENDATION

- Store above ground level in a dry area not liable to impart odours. Ensuring stock is kept at a moderate temperature (in frost-free conditions), in its original, unopened packaging.
- Optimal date of use: 2 years.
- Do not use opened packaging.

While **MANNOFEEL®** does not increase the clogging index of well prepared wines (IC < 50), if filtration clogging occurs, the filter can retain colloids and/or **MANNOFEEL®** and make treatment partially or completely ineffective.

In the case of non-filtered wines the treatment must be added the day before bottling.

DOSAGE

Between 25 - 150 mL/hL depending on the wine matrix.

PACKAGING

1 L and 10 L can.

IMPORTANT: To the extent that the conditions of use are beyond its control, LAFFORT® cannot be held responsible for failure to successful treatment and the appearance of salt crystals of tartaric acid.

