# **NUTRISTART®**

Fermentation activator associating nutritive elements that promotes yeast multiplication. 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**

Complete nutrient combining, organic nitrogen, mineral nitrogen and thiamine. This specific formulation combines different assimilable nitrogen sources (ammonium phosphate, inactivated yeast, and yeast autolysates) bringing to the yeast a fast assimilable mineral nitrogen and organic nitrogen of a slower assimilation. The yeast autolysates are richer in intracellular content and offer a significantly higher nutritional value in growth factors than inactivated yeast, that, on the other hand, contains a higher membrane fraction. The complementary nature of these two categories of yeast derivatives combined with the other components leed to the global and singular formulation of **NUTRISTART**<sup>®</sup>, a high performance nutrient.

NUTRISTART® enables:

- The development of a sufficient yeast population,
- Regular and complete alcoholic fermentation,
- The prevention of undesirable compound formation ( $H_2S$ , VA, etc.).

#### **OENOLOGICAL APPLICATIONS**

- NUTRISTART<sup>®</sup> can be used on any type of musts (white, red, rosé).
- 10 g/hL (100 ppm) of NUTRISTART® provides about 15 mg/L (15 ppm) assimilable nitrogen (mineral and organic).
- 10 g/hL (100 ppm) of NUTRISTART® provides about 0.1 mg/L (0.1 ppm) thiamine (chlorhydrate).
- To be used in the event of nutritive element deficiency in the must.

# **EXPERIMENTAL RESULTS**

Inactivated yeasts and yeast autolysates provide survival factors (long chain fatty acids, sterols) and growth factors (amino acids, minerals and vitamins). Ammonium salts (phosphates) are also essential growth factors.

With regards to efficient fermentation management, it is important to consider that a regular and complete alcoholic fermentation is an essential factor for the successful onset of malo-lactic fermentation.

#### PHYSICAL CHARACTERISTICS

Aspect powder	Density (g/L) $\approx 1200$
Color white	



#### CHEMICAL AND MICROBIOLOGICAL ANALYSIS

Humidity (%)
Lead (ppm)< 4
Arsenic (ppm) < 3
Mercury (ppm)< 1
On the part of yeast products:
Viable yeast (CFU/g) < 10 <sup>2</sup>
Mold (CFU/g)
Lactic acid bacteria (CFU/g) < 10 <sup>3</sup>

Acetic acid bacteria (CFU/g) < 10 <sup>3</sup>	
Coliforms (CFU/g) < 10 <sup>2</sup>	
E.coli (/g)none	
Staphylococcus (/g) none	
Salmonella (/25 g)none	
On the part of ammonium phosphate:	
Iron (ppm)< 50	

#### **PROTOCOL FOR USE**

# OENOLOGICAL CONDITIONS

Do not mix the preparation with active dry yeasts (ADY). Prepare the **NUTRISTART**<sup>®</sup> and add it to the tank after ADY inoculation.

It is advisable to add **NUTRISTART**<sup>®</sup> at the beginning of alcoholic fermentation, after a density loss of about 30 points (about 1/3 sugar depletion).

# DOSAGE

- 20 to 60 g/hL (200 600 ppm) for white, rosé or red. Dosage should be based on the initial assimilable nitrogen content of the must, the potential alcohol degree and the turbidity.
- European maximum legal dosage: 60 g/hL (600 ppm) (the maximum NUTRISTART<sup>®</sup> dosage supplies 0.6 ppm of thiamine). Second fermentation of spakling wines: 45 g/hL.

# IMPLEMENTATION

For red wine, NUTRISTART<sup>®</sup> can be added directly into the tank during a pump-over.

For white wine, incorporate the total quantity of **NUTRISTART**<sup>®</sup> to be added in 10 times its weight in water or must. Mix well to completely dissolve the phosphate, then incorporate immediately into the tank with homogenisation.

# STORAGE RECOMMENDATION

• Store above ground level in a dry area not liable to impart odours. Ensuring stock is kept at a moderate temperature, in its original, unopened packaging.

# PACKAGING

1 kg bag - 15 kg box. 5 kg bag - 15 kg box. 20 kg bag.

• Optimal date of use: 3 years.

