



Opti'Malo PLUS™
NUTRIENT FOR WINE BACTERIA

Opti'Malo PLUS™

NUTRIENT FOR WINE BACTERIA

Opti'Malo PLUS™ is a blend of specific inactivated yeast, rich in amino nitrogen, cell wall polysaccharides and cellulose.

Opti'Malo PLUS™ for the complex nutrient requirements

Oenococcus œni have complex nutrient requirements:

In addition to sugar and organic acids (malate, citrate & pyruvate) they require:

- organic nitrogen (amino acids and peptides).
- trace minerals (Mn, Mg, K, Na).
- vitamins.

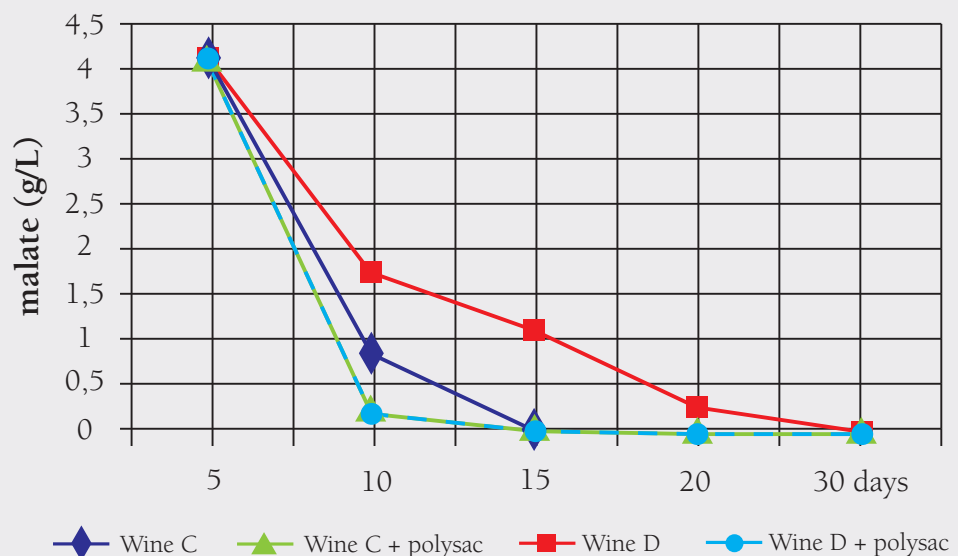
Wine is usually a poor source of these nutrients due to:

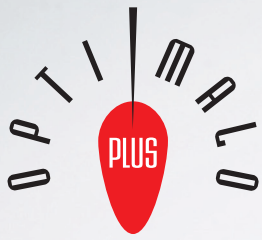
- musts already deficient in key nutrients.
- yeast with high nutrient demand used for alcoholic fermentation (AF).
- indigenous microflora may have already used them.
- early clarification and limited yeast autolyses.

Positive effect of yeast polysaccharides:

Yeast cell wall polysaccharides have been shown to have a positive effect on malolactic fermentability. Thus, wines, especially those not aged on lees, may be poor in these cell wall polysaccharides and more difficult to induce malolactic fermentation (MLF).

ML Fermentation of synthetic must using MBR bacteria at 20° C, in presence of different quantities of polysaccharides. Y. Rosi U. of Firenze



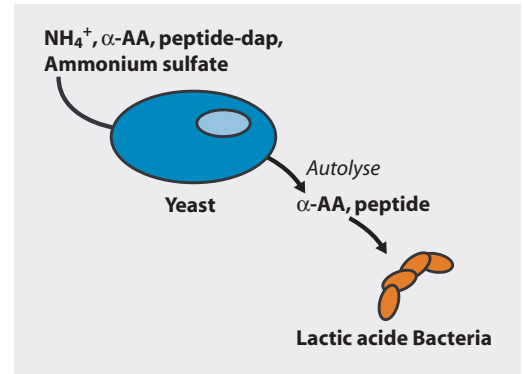


Opti'Malo PLUS™
NUTRIENT FOR WINE BACTERIA

A NATURAL NUTRIENT TO SUPPORT MLF IN WINE

To help MLF in wines, **Opti'Malo PLUS™** has been developed by blending:

- a special inactive yeast rich in amino acids, mineral cofactors and vitamins.
- a second inactive yeast preparation with high cell wall polysaccharide content.
- cellulose to provide surface for keeping bacteria in suspension and to absorb toxic compound.

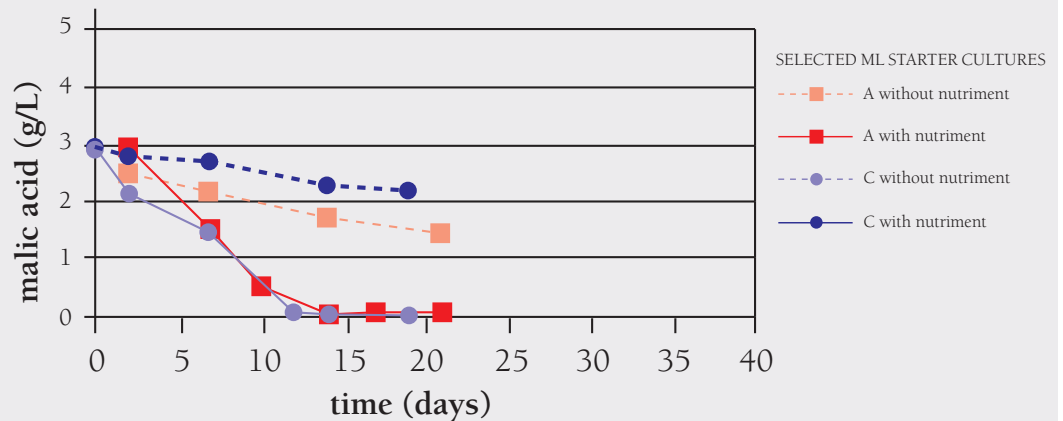


This blend results in a reduction in the duration of the malolactic fermentation.

Opti'Malo PLUS™ benefits:

- better nutrient availability in the wine.
- faster start of malolactic fermentation.
- better survival and faster growth of the bacterial starter culture.
- reduced risk of MLF by undesired bacteria due to the dominance of the selected strain.
- organoleptic preference of these wines.

Kinetics of malic acid degradation in a Cabernet Sauvignon (alcohol 13% vol, T-SO₂ 35, ppm pH 3,6) after direct inoculation with selected ML starter cultures with and without addition of Opti'Malo PLUS™



PACKAGING AND USAGE

Opti'Malo PLUS™ is a powder packaged in 1 kg sachet. The recommended dosage is 20 g/hL (1.6 lb/1,000 gal or 725g/1,000 gal) calculated on the final wine volume. Opti'Malo PLUS™ may be suspended in a small amount of water or wine and then added directly to the wine at anytime from 48 hours prior to or up until the same time as the wine bacteria addition.

Note: due to the very high polysaccharide concentration, do not use Opti'Malo PLUS™ in the rehydration of the freeze-dried malolactic culture.

STORAGE

When stored cool and dry in sealed packs Opti'Malo PLUS™ maintains its effectiveness for at least 4 years. Avoid moisture and prolonged high temperature exposure.

Distributed by :

The information is true and accurate to the best of our knowledge, however, this data sheet is not to be considered as a guarantee expressed or implied, or as a condition of sale of this product.

