





Nutrient for Malolactic 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 of Oenococcus oeni

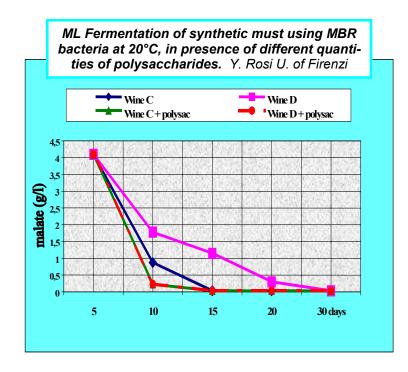
Oenococcus have complex nutrient requirements:

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 having limited available levels especially in high maturity grapes
- indigenous microflora may have already used them
- nitrogen deficiency and limited yeast autolysis



Positive effect of yeast polysaccharides:

Wines, especially those not aged on lees, are poor in yeast cell wall polysaccharides which have a positive effect on malolactic fermentability.

Opti'Malo Plus®

A NATURAL NUTRIENT TO SUPPORT MLF IN WINE

To help MLF in difficult 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 compounds

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

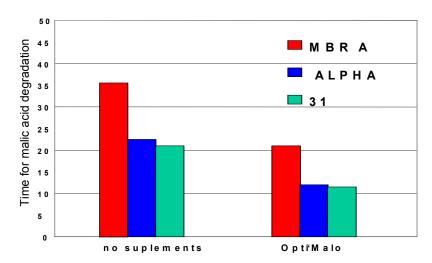
Opti'Malo Plus® benefits:

- 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

Better results in difficult wines such as:

- highly clarified white wines
- · wines from very mature grapes

2000 Chardonnay, Germany pH 3.05, alcohol 13%vol, total SO₂ <30ppm, temp. 17°C



PACKAGING AND USAGE

 $Opti'Malo\ Plus^{\otimes}$ is a powder packaged in 500 g sachets . 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 ML bacteria addition.

Note: due to the very high polysaccharide concentration in **Opti-Malo Plus** avoid combining it with the freeze-dried malolactic culture in the rehydration water.

STORAGE

When stored at 25 °C or lower temperature in sealed packs *Opti'Malo Plus*® maintains its effectiveness for at least 3 years. Avoid moisture and prolonged high temperature exposure.

Developed By:



Distributed By:



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