

BACTILESS™

Pure chitosan and chitin glucan from *Aspergillus niger*, produced in European Union

Reduce the risk of spoilage bacteria

DESCRIPTION

BACTILESS™ is a 100% natural non-GMO and non-allergenic biopolymer from fungal *Aspergillus niger* origin which helps to control the bacteria population in wines. **BACTILESS™** formula helps to lower the viable acetic and lactic acid bacteria population allowing easy removal. Despite its effectiveness towards a wide spectrum of bacteria, **BACTILESS™** does not affect *Saccharomyces cerevisiae* and the alcoholic fermentation. It can help to reduce the amount of SO₂ needed to control the bacteria population.

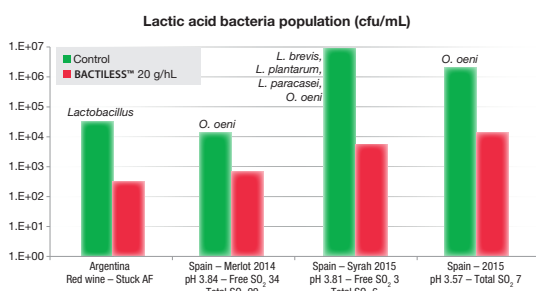


APPLICATION & RESULTS

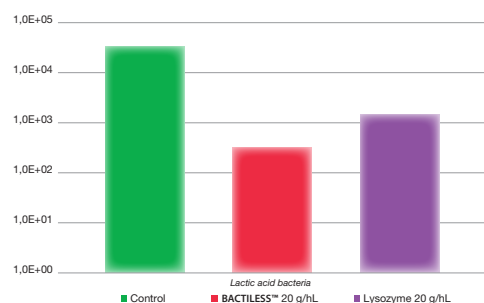
Due to its effective action against lactic acid and acetic acid bacteria, **BACTILESS™** can be used to:

- Control the indigenous flora in the earliest stages of white, rosé and red winemaking (pre-fermentative and alcoholic fermentation steps):
 - Prevent malolactic fermentation (MLF) in white and rosé juices and wines.
 - Delay MLF in red wines (sequential inoculation with a selected *Oenococcus oeni*).
- Reduce the risk of high volatile acidity from bacteria in case of stuck alcoholic fermentation.
- Stabilize the wine after MLF, to reduce the spoilage bacteria population.

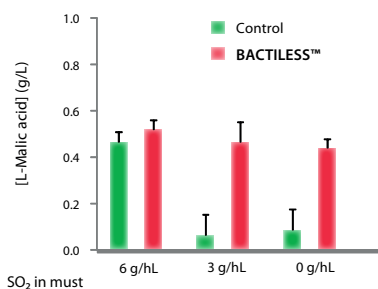
BACTILESS™ can be used to drastically reduce bacteria population and to prevent bacteria growth in wines offering an interesting alternative to lysozyme treatment and/or significant amounts of SO₂. **BACTILESS™** helps to protect wines from spoilage lactic acid bacteria and reduces their production of metabolites such as biogenic amines.



Lactic acid bacteria management in red wines in Winery-scale trials.



Lactic acid bacteria management in a red wine
Spoilage bacteria contamination occurred during a stuck alcoholic fermentation (Malbec, Argentina, 2015)



Reduction of the bacterial load and control of MLF development. Addition of 20 g/hL BACTILESS™ on Macabeu must (base cava winemaking with different SO₂ levels). Malic acid after alcoholic fermentation (Universitat Rovira I Virgili, Spain).

Acetic acid bacteria

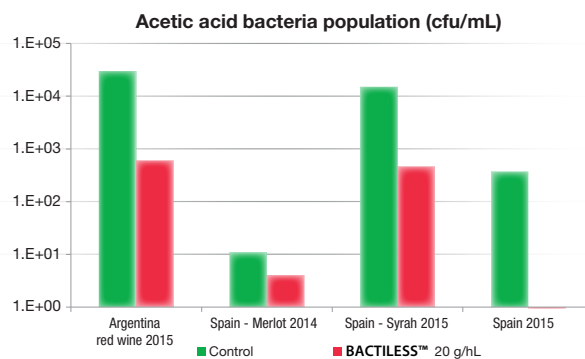
BACTILESS™ is also effective against acetic bacteria helping to lower viable population and prevent their growth.

This application can help to control volatile acidity levels.

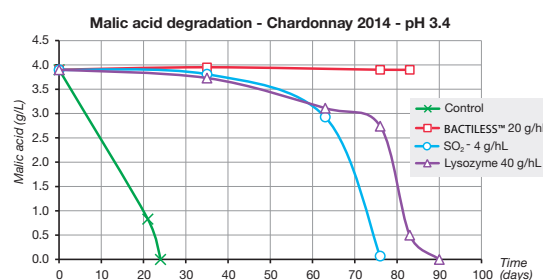
Malolactic fermentation control

In white and rosé wines, **BACTILESS™** can help to delay or inhibit malolactic fermentation when it's not desired.

In red wines, **BACTILESS™** can be used to delay the malolactic fermentation after treatment followed by racking.



Acetic acid bacteria management in red wines in Winery-scale trials.



Trial in a Chardonnay wine (pH = 3.4) in collaboration with IFV: Comparison of different microbial stabilization tools and kinetics of malic acid degradation in the case of a lactic acid bacteria contaminated wine.

INSTRUCTIONS FOR OENOLOGICAL USE

Recommended dosage: 20 g/hL to 50 g/hL in case of high level contamination.

- When applied in must suspend **BACTILESS™** in 20 times its weight in water and homogenize gently by stirring. Then add to the must mix thoroughly the whole volume of the tank.
- BACTILESS™** effect is quick within a few hours after the treatment. When applied in wine, average contact time recommended in wine is 5 to 10 days for settling. Then rack the wine and separate from it lees.

For more details about dosage and application, please contact your Lallemand representative.

PACKAGING AND STORAGE

- 10 x 500 g jars.
- Store in a cool dry place.
- To be used once opened.

Distributed by:

The information in this document is correct to the best of our knowledge. However, this data sheet should not be considered to be an express guarantee, nor does it have implications as to the sales condition of this product. June 2022.



WINE
YEASTS



WINE
BACTERIA



NUTRIENTS
/PROTECTORS



SPECIFIC
YEAST DERIVATIVES



ENZYMES



CHITOSAN



VINEYARD
SOLUTIONS



LALLEMAND OENOLOGY

Original by culture

Visionary biological solutions - Being original is key to your success. At Lallemand Oenology, we apply our passion for innovation, maximize our skill in production and share our expertise, to select and develop natural microbiological solutions. Dedicated to the individuality of your wine, we support your originality, we cultivate our own.

www.lallemandwine.com