



## Pinnacle™ MLF Bacteria

features and benefits sheet






## Secure and speedy MLF

Faster wine making, quicker profits!

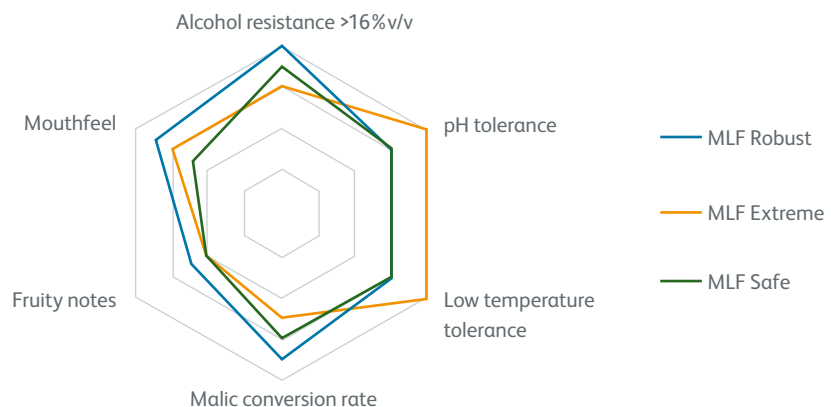
### Introduction:

Malolactic bacteria can play an essential role in winemaking. Malolactic fermentation (MLF) not only converts tart tasting malic acid, naturally present in grape must, into softer tasting lactic acid, but also has a direct impact on wine quality. MLF is also crucial to microbiologically stabilise most red wines. It is predominantly strains within the *Oenococcus oeni* family that conduct malolactic fermentation.

### Benefits

	MLF ROBUST 	MLF EXTREME 	MLF SAFE 
<b>Versatility</b>	Ideal for high alcohol red wines	Best for cool climate, low pH wines and cold cellars	Suitable for a wide spectrum of wine types
<b>Aromatic Contribution</b>	Clean red berries and spice with soft tannins	Clean fruit aromas with spice and vanilla	Enhances softness and aromatic complexity
<b>Performance</b>	Fast and effective in high alcohol environments	Efficient under low pH and low temperature conditions	Ensures malolactic fermentation even under challenging conditions
<b>Quality Assurance</b>	No detectable biogenic amines and consistently high performance	No detectable biogenic amines and consistently high performance	Fast-acting, SO <sub>2</sub> resistant, and does not produce detectable biogenic amines
<b>Ease of Use</b>	Direct addition to wine, simple rehydration instructions for difficult wines	Direct addition to wine, simple rehydration instructions for difficult wines	Direct addition to wine, simple rehydration instructions for difficult wines

### Features of Pinnacle™ MLF range



For more information, please contact:

AB Biotek  
wineinfo@abbiotek.com




www.abbiotek.com  
www.pinnaclewineingredients.com

**AB Biotek**  
PARTNERS IN FERMENTATION™  
A business division of AB MAURI

# Pinnacle™ MLF Bacteria

*features and benefits sheet*

## Features

	MLF ROBUST 	MLF EXTREME 	MLF SAFE 
Type	<i>Oenococcus oeni</i> strain for high alcohol tolerance	<i>Oenococcus oeni</i> strain for low pH and low temperature tolerance	Blend of two <i>Oenococcus oeni</i> strains for versatility
Characteristics	High cell count, SO <sub>2</sub> resistant, free of biogenic amines	Highly concentrated, SO <sub>2</sub> resistant, free of biogenic amines	High concentration, stress-tolerant
Applications	High-alcohol red wines (>15% v/v ethanol)	Low pH white wines, cool climate wines when cellars start to get cold	Wide range: low pH white to high-alcohol red wines
Formulation	Pure concentrated active freeze-dried culture	Pure concentrated active freeze-dried culture	Pure concentrated active freeze-dried culture
Dosage	1 g/hL	1 g/hL	1 g/hL
Packaging	25g and 250g laminate sachets	25g and 250g laminate sachets	25g and 250g laminate sachets
Storage Conditions	Store at -18°C (-0.4°F)	Store at -18°C (-0.4°F)	Store at -18°C (-0.4°F)
Shelf Life	3 years at -18°C; 18 months at 4°C	3 years at -18°C; 18 months at 4°C	3 years at -18°C; 18 months at 4°C
Min - Max Temp	18-27°C (59-81°F)	15-27°C (59-81°F)	18-27°C (64-81°F)
pH Tolerance	≥ 3.2	≥ 3.0	≥ 3.2
Alcohol Resistance	≤ 16.5%	≤ 14.5%	≤ 15%
Fermentation Rate	Very Fast	Moderate	Fast

***Pinnacle Winemaking Solutions...***

...your partner for efficient and exceptional winemaking.



For more information, please contact:

AB Biotek  
wineinfo@abbiotek.com

www.abbiotek.com  
www.pinnaclewineingredients.com

**AB Biotek**  
PARTNERS IN FERMENTATION™  
A business division of AB MAURI

**PINNACLE™**