LACTOENOS 450 PreAc®

Œnococcus œni strain for a quick MLF start, combined with the exclusive production process: PreAc®. 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 AND OENOLOGICAL APPLICATIONS

- · Strain with a high resistance to ethanol.
- One of the strains with the highest malolactic activity on the market in optimal conditions.
- · Low production of diacetyl and ethyl lactate.
- · Low volatile acidity (VA) production.
- · No biogenic amine production.
- The blend of effectiveness and cost makes **LACTOENOS 450 PreAc**® the ideal preparation for the control and reliability of malolactic fermentation in white and red wines of any style.

TAV (% vol)	Up to 17
рН	From 3.3
Total SO ₂ (mg/L)	Up to 60
Temperature	From 16°C (60.8 F)

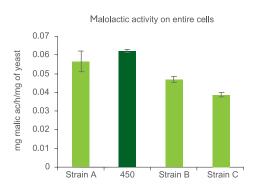
Survival and activity spectrum of the **LACTOENOS 450 PreAc**® bacteria:

LACTOENOS 450 PreAc® allows a rapid onset of MLF. Implementation is simple (in 30 minutes only for early coinoculation and in 12 hours for late co-inoculation or post AF inoculation).

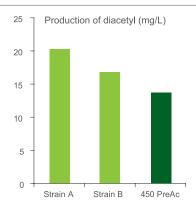
LACTOENOS 450 PreAc® is aromatically neutral and permits to preserve the fruity character of the wine.

 $NB: These\ parameters\ have\ a\ cumulatively\ inhibiting\ effect.$

EXPERIMENTAL RESULTS



Malolactic activity: quantity of malate degraded per time unit (h) and per quantity of cells (mg of yeast), in buffer medium at 25°C /77°F.



Diacetyl production by 3 strains. Sample after MLF. * Merlot wine, 2005.



PHYSICAL CHARACTERISTICS

Aspect	. Powder Co	olour	Clear	beige

CHEMICAL AND MICROBIOLOGICAL ANALYSIS

Humidity (%)	< 8
Bacteria counted on each Petri dish (CFU/g) >	1011
Mould (CFU/g)	: 10³
Yeast (CFU/g)	: 10³
Acetic bacteria (CFU/g) <	104
Salmonella (/25g)	lone
Staphylococcus (/g)	lone

Coliforms (CFU/g) < 1	02
F. <i>coli</i> (/g) No	ne
Lead (ppm) <	: 2
Mercury (ppm) <	: 1
Arsenic (ppm) <	: 3
Cadmium (ppm) <	: 1

PROTOCOL FOR USE

- Inoculate as soon as possible. There are several inoculation methods:
 - Early co-inoculation (bacteria inoculation 24 48h after the alcoholic fermentation start), technique more and developed that we advise for its many advantages like the optimisation of bacteria efficiency.
 - Late co-inoculation (inoculation at 1020 1010 density).
 - Sequential inoculation.
- Do not use opened bags.
- Use a container inert and clean. Mix 1 L of mineral water and 1 L of wine at 20°C /68°F for 50 hL dose. Dilute **ENERGIZER**®, and then add the **LACTOENOS 450 PreAc**® dose. Homogenise and let it rest for 30 minutes in early co-inoculation, 12h at 20°C /68°F in late co-inoculation or sequential inoculation. Add to the tank.
- Maintain the tank temperature throughout the MLF (at about 20°C /68°F).
- In hard conditions (sluggish AF, poor medium or high alcoholic degree) and for a quicker MLF kinetic, add 20 -40 g/hL of MALOBOOST®.
- Respect the volume of wine indicated on the bacteria dose (50 hL).
- LACTOENOS® 450 PreAc can be used in organic winemaking without the use of ENERGIZER®.

STORAGE RECOMMENDATION

- On reception, keep refrigerated (-18°C /-0.4°F or +4°C/32°F) in its unopened original packaging.
- Optimal date of use: 30 months at -18°C /-0.4°F.
 18 months at +4°C/32°F.
- Do not use opened packaging.

PACKAGING

• Dose for 50 hL and 250 hL (ENERGIZER® suplied).

