

# A solution to secure malolactic fermentation under acidic conditions (pH>3.1) A selected wine bacteria + its specific activator

# **DESCRIPTION**

Based on the synergy effect of a specific activator, and a wine bacteria isolated from nature and selected by Institut Français de la Vigne (IFV) for its high tolerance to low pH and high acidity of wine, ACIDOPHIL+™ permits to achieve a quick MLF under limiting conditions (pH> 3.1).



# BENEFITS & RESULTS

ACIDOPHIL+™ is an effective solution for acidic white and rosé wines (Chardonnay, Riesling, Grolleau, Colombard, Manseng, Chenin, Verdejo...) known as difficult for Malolactic fermentation (MLF).

ACIDOPHIL+<sup>™</sup> has a specific protocol of use studied in partnership with IFV: after 3 days of preparation before inoculation in wine, ACIDOPHIL+<sup>™</sup> has a strong malolactic performance with a reduced duration of the MLF under these difficult wine conditions.

# **PROPERTIES**

#### **Activator**

• Selected to improve the activation and the growth of the ACIDOPHIL+™ bacteria strain

### Bacteria strain: Oenococcus œni

- pH>3.1
- MLF temperature: 16°C (always < 18°)
- Alcohol < 14% volume
- $SO_2 < 45 \text{ mg/L total } SO_2$  (pay attention to molecular  $SO_2$  at low pH)
- · Low production of diacetyl in sequential inoculation (when bacteria are inoculated post-alcoholic fermentation)
- Low volatile acidity production
- Bacteria cinnamoyl esterase negative: cannot produce precursors for ethylphenol production by Brettanomyces

# **ACIDOPHIL**+™

- Sequential inoculation
- · Good implantation and fast MLF
- Addition of bacteria nutrient OPTI'MALO™ BLANC in wine is always advised in white and rosé wines (due to low availability of organic nitrogen)



# **INSTRUCTIONS FOR OENOLOGICAL USE**

Use one sachet for right quantity of hL indicated on label. Lowering the dosage or doing cross seeding or pitching methods will reduce the bacteria performance.

Sequential inoculation (post alcoholic fermentation) for 50 HL of wines

This protocol requires two steps of activation & growth for a total duration of 3 days.

#### 1st step:

- Volume of 25 L / Temperature =  $20^{\circ}$ C /  $\pm 2$  days
- Mix 12.5 L of drinking water and 12.5 L of wine ready to be inoculated, at temperature 20°C.
- Use a suitable vessel with air-lock or cover.
- Suspend content of the activator sachet in the water/wine mix.
- Then, add the content of the wine bacteria sachet and suspend carefully by gently stirring.
- Maintain the temperature at 20°C. Wait for 40 to 60 hours.

#### 2nd step:

- Volume of 50 L / Temperature = 20°C / ± 1 day
- After the first step, add 25 L of wine (temperature 20°C) to the ACIDOPHIL+™ bacteria suspension.
- Use a suitable vessel with airlock or cover.
- Maintain the temperature at 20°C. Wait for 20 to 30 hours.

#### **Inoculation of wine:**

- Ensure that the temperature of final wine ready to be inoculated is between 16-18°C.
- To ensure an adequate supply of bacteria nutrients and to help the ACIDOPHIL+™ bacteria survive in the final wine environment, we recommend to add OPTI′MALO™ BLANC (dosage 20g/hL calculated on the final wine volume).
- Then transfer the malolactic bacteria starter culture into the final volume of wine (50 hL) until the end of MLF. Monitor malolactic fermentation activity (malic acid degradation) every 2 to 4 days

Note: the respect of the range of temperature between 16-18°C in the final tank is very important prior to inoculate with the preparation of ACIDOPHIL+ $^{\text{TM}}$  bacteria. A higher temperature could compromise the success of the inoculation. Possible to increase temperature to 20°C when malic acid degradation has started, to increase the malolactic activity.

# PACKAGING & STORAGE

1 dose for 50 hL (1320 gal.)

- Product in powder form obtained by lyophilization.
- 1 package containing 2 sachets (1 sachet for the activator and 1 sachet for wine bacteria)
- Once opened, the 2 sachets must be used immediately.
- This product can be stored for 18 months at 4°C and 36 months at -18°C in original sealed packaging.
- Sealed packets can be delivered and stored for 3 weeks at ambient temperature (<25°C/77°F) without significant loss of viability.

#### 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. January 2022.















