This sensory contribution can be further supported by the combination with an appropriate selected yeast strain and timing of ML bacteria inoculation.

APPLICATION
ENOFERM ALPHA™ was selected by the Institut Français de la Vigne et du Vin (IFV) for its high survival rate after inoculation into wine, its dominance during malolactic fermentation (MLF) and its capacity to achieve reliable MLF in very different conditions of white and red wines. ENOFERM ALPHA™ improves wine aroma complexity and mouthfeel. ENOFERM ALPHA™ isn’t capable of producing histamine or other biogenic amines. Thanks to its good implantation, ENOFERM ALPHA™ helps to secure and preserve wine quality.

OENOLOGICAL AND MICROBIOLOGICAL PROPERTIES
- pH tolerance : > 3.2
- Alcohol tolerance : up to 15.5 % vol.
- SO₂ tolerance : up to 50 mg/L total SO₂ (pay attention to molecular SO₂ at low pH)
- T° tolerance : > 14°C
- Low nutrition demand
- Good implantation
- Low volatile acidity production
- MLF Kinetic : Fast
- No production of biogenic amines
- Co-inoculation recommended
- Sensitive to excessive O₂ exposure
- Bacteria cinnamoyl esterase negative: cannot produce precursors for ethylphenol production by Brettanomyces

ORGANOLEPTICAL PROPERTIES
Beyond bio-deacidification, ENOFERM ALPHA™ is a true winemaking agent, which contributes to the sensory complexity and the quality of wine as follows:

- Buttery impact (Diacetyl production):
  - Moderate in Sequential inoculation
  - Low in Co-inoculation
- Reduction of green and vegetative flavours
- Velvet red fruits
- Roundness
- Mouthfeel
- Respect varietal aromas
- High in ethyl propanoate

This sensory contribution can be further supported by the combination with an appropriate selected yeast strain and timing of ML bacteria inoculation.
INSTRUCTIONS FOR USE

SEQUENTIAL INOCULATION (POST-ALCOHOLIC FERMENTATION)

Bacteria inoculation: two options

- **Direct inoculation without rehydration**: Open the sachet and add the bacteria directly into the wine after the end of alcoholic fermentation at the top of the tank or while emptying the tank.
- **Direct inoculation with rehydration step**: For best distribution, you can rehydrate the packet of freeze-dried selected wine bacteria in 20 times its weight of clean chlorine free water at 20°C for a maximum of 15 minutes. Add this suspension directly to the wine towards the end of the alcoholic fermentation.

- Stir gently to evenly distribute the selected wine bacteria and minimize the oxygen pickup.
- Under more difficult conditions, add a specific bacteria nutrient.
- Check malolactic fermentation activity (malic acid degradation) every 2 to 4 days.
- Stabilize wine once malolactic fermentation (MLF) is finished.

**Recommended temperature range**:
- White wine / rosé wine: from 16 to 20°C.
- Red wine: from 17 to 25°C.

If limiting conditions (high alcohol > 14.5 vol, or low pH < 3.1, or high SO₂ > 45 ppm): from 18 to 22°C.

CO-INOCULATION (SIMULTANEOUS ALCOHOLIC FERMENTATION)

1/ **Yeast addition**
Rehydrate the selected dry yeast according to the instructions. Preferably in presence of a rehydration nutrient and inoculate the must.

2/ **Bacteria addition**
Depending on the SO₂ addition at crush:
- Sulfitage < 5 g/hL: wait for 24 hours
- Sulfitage 5-8 g/hL: wait for 48 hours
- **Direct inoculation of bacteria without rehydration**: open the sachet and add the bacteria directly to the must/wine to be fermented from the top of the tank (white must) or during a pumping-over (red must).
- **Direct inoculation with rehydration step**: for best distribution, you can rehydrate the packet of freeze-dried lactic acid bacteria in 20 times its weight of clean chlorine free water at 20°C for a maximum of 15 minutes and add the suspension to the must/wine to be fermented.

- Assure a good distribution.
- Carefully monitor must temperature, which must be below 30°C at lactic acid bacteria inoculation (alcohol < 5% vol) and below 27°C when the level of 10% of alcohol is reached.
- Complex nutrients addition at 1/3rd of alcoholic fermentation is recommended.
- Monitor malic acid and volatile acidity.
- If MLF takes place during AF and an unusual increase in volatile acidity is observed add Lysozyme™ (150-200 mg/L).
- Top the wine after alcoholic fermentation (AF).
- Otherwise rack and stabilize after MLF.

PACKAGING AND STORAGE

- Product in powder form obtained by lyophilisation.
- Available in different dosages for 2.5 hL (66 US gal.) — for 25 hL (660 US gal.) — for 250 hL (6,600 US gal.)
- Once opened, lactic acid bacteria sachet must be used immediately.
- This product can be stored for 18 months at 4°C/40°F or 36 months at -18°C/0°F 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.

The information herein is true and accurate to the best of our knowledge; however, this data sheet is not to be considered as a guarantee expressed or implied or as a condition of sale of this product.

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