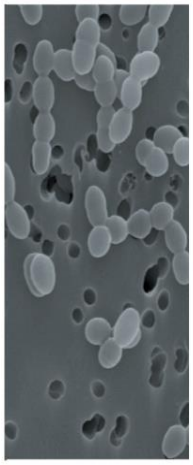
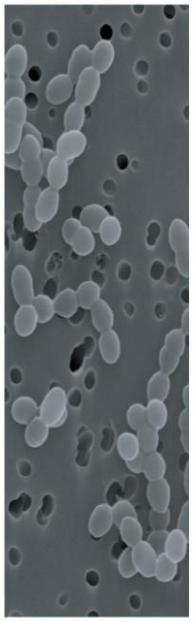
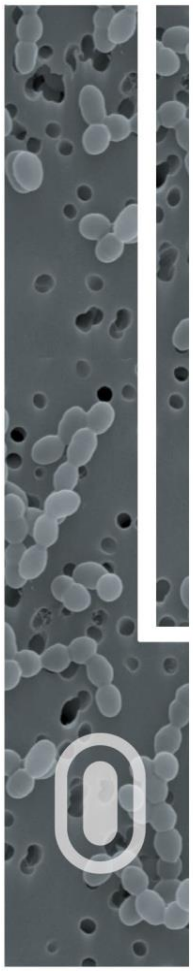






VITILACTIC® STARTER BL01™

Lactic acid bacteria for high acidity white wines.

Preparation controlled by the microbiology laboratory of the "Pôle Technique et Environnement du CIVC".

--- APPLICATIONS ---

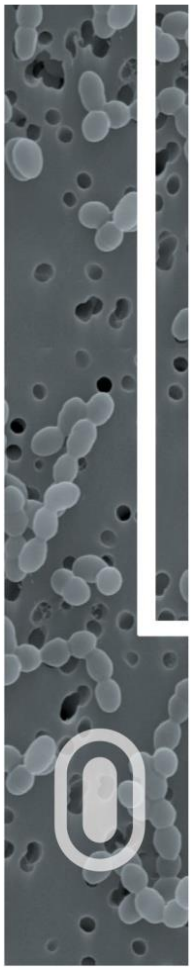
Selected from sparkling French wines, **VITILACTIC® STARTER BL01™** is especially suitable for the de-acidification of white wines, including the most acidic ones.

VITILACTIC® STARTER BL01™ also contributes to the production of wines with considerable aromatic elegance and well preserved fruitiness.

--- MICROBIOLOGICAL AND ENOLOGICAL PROPERTIES ---

- **Species:** *Oenococcus oeni.*
- **Alcohol tolerance**: ≤ 14% volume.
- **Application temperature**: between 20 and 23 °C.
- **High SO_2 tolerance**: up to 70 mg/L of total SO_2.
- **Low pH tolerance**: **VITILACTIC® STARTER BL01™** is a very acidophilic lactic acid bacterium able to grow at pH values above 2.85 after acclimatization (through preparation of a bacterial starter).
- **Volatile acidity production**: very low. **VITILACTIC® STARTER BL01™** lacks the enzyme citrate permease and does not metabolize citric acid. Thus, the risk of volatile acidity production from transformation of citric acid is avoided.
- **Production of biogenic amines:** low.
- **Organoleptic deviation**: none. Since **VITILACTIC® STARTER BL01™** does not degrade citric acid, it does not produce diacetyl, which is responsible for strong lactic and buttery notes.
- **"Phenol negative" bacteria**, which means that **VITILACTIC® F** cannot degrade coutaric acid into coumaric acid which is the origin of volatile phenol precursors responsible for the development of the off-odors associated with *Brettanomyces bruxellensis*.

VITI LACTIC® STARTER BL01™



--- INSTRUCTIONS FOR USE ---

Inoculation with **VITILACTIC® STARTER BL01™** involves the following protocol:

From a complete "marc" ("cuvee" and "taille") of 25.5 hL non chaptalized and with half of the dose of SO_2:

Reactivation phase and the "malolactic fermenting starter" have to be realized at the same time.

Reactivation		Malolactic fermenting starter
• "Taille" with half of the dose of SO_2: 0.75 hL • Hot water: 0.75 hL • Activator PRE-LACTIC: 0.75 kg • Bacterias VITILACTIC® STARTER BL01™: 600 g • Yeasts VITILEVURE DV10®: 75 g	⇨ After 3 days	• "Cuvée": 20.5 hL • "Taille": 4.25 hL • Yeasts: VITILEVURE DV10® : 500 g
Tank of 3 hL **Temperature of 25°C**		**Tanks of 27 to à 30 hL** **Temperature of 25°C during the AF then 20°C during the MLF**

Reactivation phase

In a 3 hL container, dilute 0.75 hL of "taille" with the same volume of hot water to get a final temperature of 25°C.

Add the **PRE-LACTIC activator** (0.75 kg), preferably in a part of the hot water before incorporation in the must, to facilitate the distribution. The activator could thus increase the pH of the reactivation medium till 3.2 to 3.5 (it is consequently not necessary to control the pH during this phase).

Add directly (without any rehydration) in the reactivation medium 75 g of the yeasts **VTITILEVURE DV10®** and 600 g of the bacterias **VITILACTIC® STARTER BL01™**. Sprinkle these powders, stirring the medium.

Keep the temperature of the reactivation medium at 25°C. After 3 days, add the reactivation medium into the malolactic fermenting starter (analytic controls are not necessary).

Malolactic fermenting starter

The rest of the "marc" (20.5 hL of "cuvee" + 4.25 hL of "taille") is blended in a tank of 27 to 30 hL. This must starts the fermentation with 500 g of the yeasts **VTITILEVURE DV10®** previously rehydrated in a mix must/water (1/2 h at 35°C). The temperature of fermentation of the starter is maintained at 25°C.

After 3 days, the reactivation medium can be incorporated in the fermenting starter. As soon as the alcoholic fermentations is finished, maintain the temperature at 20°C.

Use of the "malolactic fermenting starter"

The malolactic fermenting starter is used when the decrease of the acidity is equivalent to the 2/3rd of the acid malic degradation. This stage is evaluated:

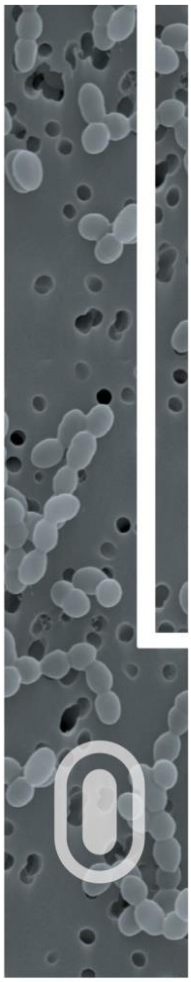
- by the malic acid analysis (final content is roughly 1.5 g/L),
- or by the decrease of the total acidity (roughly 1.5 to 2 g H_2S0_4/L compared to the one of the must).

The analytic control of the malolactic fermenting starter is done after 6 days, then every 2 days.

Nutritional complement recommended:
For the wines likely to have deficiencies in essential nutrients for lactic bacterias (must with a nitrogen deficiency, botrytized must, must very clarified, wine from Chardonnay…): add 20 to 30 g/hL of MALOVIT® B before inoculation with the starter of **VITILACTIC® STARTER BL01™**.

This protocol has been suggested by the CIVC and is related to the winemaking of sparkling wines (Cf. article "Faire la fermentation malolactique sans chauffage"-"How to do the malolactic fermentation without heating" published by the CIVC in the review "Le Vigneron Champenois – June 2009).

VITI LACTIC® STARTER BL01™



To inoculate 100 hL of wine
(or any other volume, taking into account the values in % and in g/L):

Reactivation	
• "Taille" with half of the dose of SO_2: 10 L (or 3% of the starter) • Hot water: 10 L (ou 3% of the starter) • Activator PRE-LACTIC : 100 g (or 5 g/L) • Bacterias VITILACTIC® STARTER BL01™ : 80 g (or 4 g/L) • Yeasts VITILEVURE DV10® : 10 g (or 0,5 g/L)	20 liters

After 3 days ⇩

Malolactic fermenting starter	
• Non-chaptalized must with half of the dose of SO_2: 3 hL (or 3 % of the volume to inoculate) • Yeasts VITILEVURE DV10® : 60 g (or 0,2 g/L)	3 hL

When the malic acid is roughly 1.5 g/L ⇩

Tank	
• 100 hL of fermenting wine or at the end of the AF	100 hL

--- PACKAGING ---

25 g, 100 g or 500 g kits.

--- STORAGE AND TRANSPORT ---

Store unopened original package:

- 18 months at 4°C.
- 36 months at -18°C.

Once opened, use rapidly.

Can withstand several days at room temperature.

Indeed, the quality of the **VITILACTIC** bacteria is preserved if the product is stored at room temperature at a temperature below 25°C. Similarly, their quality is not affected by temperature variations during transport provided that their frequency and intensity are limited:

- Do not expose the product at a temperature above 30°C.
- Limit the number of temperature peaks between 25 and 30°C.

A Danstar product, distributed by:

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