



# INOBACTER™

## APPLICATION

**The ideal bacterial strains for conducting MLF in low pH wines, such as sparkling wine.**

Adding selected bacteria triggers malolactic fermentation for white and rosé wines.

**INOBACTER™** is used following a three stage protocol (reactivation, acclimatisation, and seeding the tank) which enables bacteria to adapt to the lowest pHs.

**INOBACTER™** can be used as Co-inoculation with yeast or inoculated after the completion of alcoholic fermentation (Sequential)

The excellent tolerance of this strain to extreme wine conditions enables an effective malic acid metabolism.

## MICROBIAL AND OENOLOGICAL PROPERTIES

- pH tolerance > 2.9
- Alcohol tolerance: up to 14 % vol.
- SO<sub>2</sub> tolerance: up to 50 mg/L total SO<sub>2</sub>
- Low production of volatile acidity
- Limited production of diacetyl
- No production of biogenic amines



## CHARACTERISTICS

*Oenococcus oeni* selected by the International Champagne Committee (CIVC).

The micro-organisms are not genetically modified.

Each batch is rigorously controlled by the CIVC.

### PACKAGING AND STORAGE

- Sachet sizes: 25 hL wine and 100 hL wine
- The aluminium sachet packaging protects contents from oxygen and moisture. At minus 18 °C viability will last for two years.
- Once opened the contents should be used immediately. Use by the best before date stamped on the packaging.

## INSTRUCTIONS FOR USE

### FOR USE IN CO-INOCULATION

#### STEP 1: Prepare the Bacteria Starter (BS) Medium

- a. Allow **juice** to settle first day of harvest
  - Remove at least 3% of the volume of the tank into a separate vessel (see **Table 1** for an example). Ensure the  $SO_2 < 40\text{ppm}$ , pH 3.2 - 3.3
  - Add 20-30g/hL of yeast (the one to be use to ferment the base wine) and 50g/hL of **Fermaid® AT**. Maintain the temperature between 20-25°C
  - This will be used later in step 3.

#### STEP 2: Reactivate the Bacteria

- b. Prepare the Reactivation Medium (RM)
  - Make up a juice / non-chlorinated water mixture as per the volumes in Table 1.
  - The volume is based on the size of Inobacter kit used.
  - Ensure it's at 25°C, pH 3.2-3.3, total  $SO_2 < 40\text{ppm}$
  - Add the Activator and mix well.
- c. Bacteria Rehydration (BR)
  - Remove a volume of the Reactivation Medium into a separate container. The volume is specified in Table 1, dependent on the size of **INOACTER™** sachet used.
  - Ensure the temperature of the medium is 23-25°C.
  - Add the contents of the bacteria sachet to this medium
  - Wait for 15 mins
- d. Incorporate the Bacteria Rehydration (BR) mixture from step (c) into the Reactivation Medium (RM) from step (b)
  - Maintain at 23-25°C.
  - **\*\*\*WAIT** – This Reactivation Medium is ready when the Malic Acid is  $< 1\text{g/L}$

#### STEP 3: Acclimitisation stage of the bacteria

- e. Acclimitisation Mixture (AM)
  - When the Reactivation Medium (RM, prepared in Step 2) is ready, add to the Bacteria Starter Medium (BS), prepared in Step 1.
  - Mix well and determine the malic acid concentration of this mixture.
  - Maintain at 20°C
  - This Acclimisation medium is ready when 2/3rds of the malic acid has been consumed.

#### STEP 4: Juice/Wine Inoculation

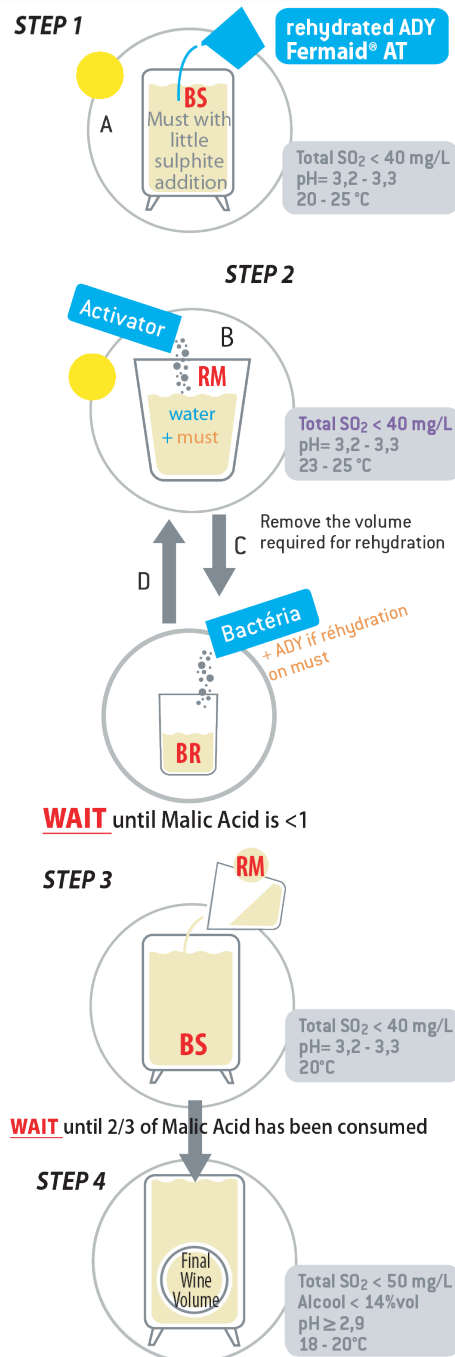
- f. Add the acclimatisaton mixture (AM), from Step 3, to the total volume of **ferment**. Gently mix. Maintain at 18-20°C.

TABLE 1 – Guidelines for Co-Inoculation

Total volume of wine to be inoculated	Inobacter Kit	Step 1 (a) - BS 3% of total must volume	Step 2 (b) - RM Total reactivation volume	Step 2 (c) Volume to be used for bacterial rehydration
2500L	25hL	75L	5L (2.5L juice + 2.5L water)	1L
10,000L	100hL	300L	20L (10L juice + 10L water)	2L

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.

## CO-INOCULATION



## INSTRUCTIONS FOR USE

### FOR USE IN SEQUENTIAL INOCULATION

#### STEP 1: Reactivate the bacteria

- a. Reactivation Medium (RM)
  - Make up a wine / non-chlorinated water mixture as per the volumes in Table 1.
  - The volume is based on the size of Inobacter kit used.
  - Ensure it's at 25°C, pH 3.2-3.3, total SO<sub>2</sub> <40ppm
  - Add the Activator and mix well.
- b. Bacteria Rehydration (BR)
  - Remove a volume of the Reactivation Medium into a separate container. The volume is specified in Table 1, dependent on the size of Inobacter sachet used.
  - Ensure the temperature of the medium is 23-25°C.
  - Add the contents of the bacteria sachet to this medium
  - Wait for 15 mins
- c. Incorporate the Bacteria Rehydration (BR) mixture from step (b) into the Reactivation Medium (RM) from step (a).
  - Maintain at 23-25°C.
  - **\*\*\*WAIT** – This Reactivation Medium is ready when the Malic Acid is <1g/L

#### STEP 2: Acclimitisation stage

- d. Acclimitisation Mixture (AM)
  - Remove 3% of the volume of wine to be inoculated into a separate tank. Refer to Table 1 for an example.
  - Add the Reactivation Medium/**Bacteria (from Step 1c)** to this wine. Mix well and determine the malic acid concentration of this mixture.
  - Maintain at 20°C
  - This Acclimisation medium is ready when 2/3rds of the malic acid has been consumed.

#### STEP 3: Wine inoculation

- e. Add the acclimatisaton mixture (AM) to the total volume of wine. Gently mix. Maintain at 18-20°C.

### SEQUENTIAL INOCULATION

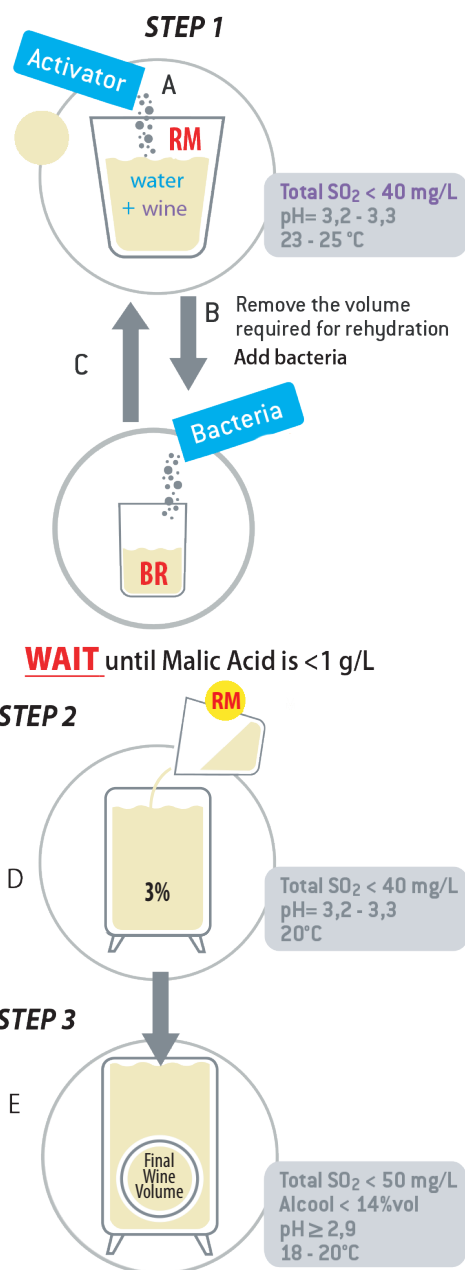


TABLE 1 – Guidelines for Sequential Inoculation

Total volume of wine to be inoculated	Inobacter Kit	Step 1 (a) - RM Total Reactivation volume	Step 1 (b) Volume to be used for bacterial rehydration	Step 2 (d) - AM 3% of total wine volume
2500L	25hL	5L (2.5L wine + 2.5L water)	1L	75L
10,000L	100hL	20L (10L wine + 10L water)	2L	300L

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