

## INOBACTER™

#### **APPLICATION**

## The ideal bacterial strain 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, acclimitisation, 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.



# Ver 1.1 / 10.2018

#### INSTRUCTIONS FOR USE

#### FOR USE IN SEQUENTIAL INOCULATION

#### STEP 1: Reactive 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</li>
  - · 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</li>

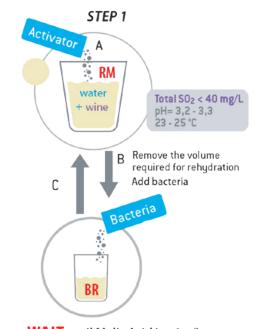
#### STEP 2: Acclimitisation stage

- **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 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.

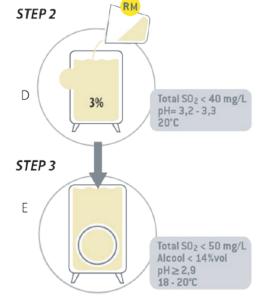
#### STEP 3: Wine inoculation

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
2,500L	25hL	75L	5L (2.5L juice + 2.5L water)	1L
10,000L	100hL	300L	10L (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.



#### INSTRUCTIONS FOR USE

#### FOR USE IN CO-INOCULATION

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

- a. Allow must to settle first day of harvest
  - Remove at least 3% of the volume of the tank into a seperate vessel. Ensure the SO<sub>2</sub> <40ppm, pH 3.2 3.3
  - Add 20-30g/hgL 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 2.
  - 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.
- 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 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
- **d**. Incorporate the Bacteria Rehydration (BR) mixture from step (c) into the Reactivation Medium (RM) from step (a)
  - Maintain at 23-25°C.
  - \*\*\*WAIT This Reactivation Medium is ready when the Malic Acid is <1q/L

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

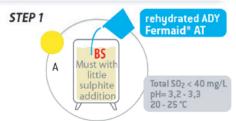
- **e**. Acclimitisation Mixture (AM)
  - When the Reactivation Medium (RM, prepared in Step 2) is ready, add to the Bacteria Starter Medium (BS), prepared in Step 1.
  - Mix well and determine the malic acid concentration of this mixture.
  - · Maintain at 20°C
  - This Acclimisation medium is ready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

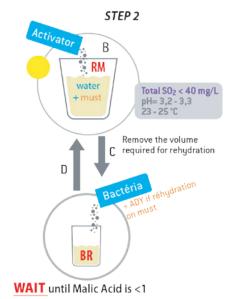
#### STEP 4: Wine Inoculation

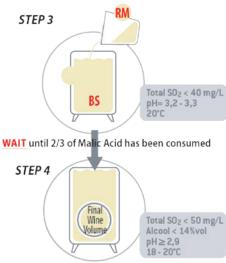
**f**. Add the acclimatisaton mixture (AM), from Step 3, to the total volume of wine. Gently mix. Maintain at 18-20°C.

#### **TABLE 1 –** Guidelines for Co-Inoculation

### **CO-INOCULATION**







Total volume of wine to be inoculated	Inobacter Kit	Step 1 (a) - AM 3% of total must volume	Step 2 (b) - RM Total reactivation volume	Step 2 (c) Volume to be used for bacterial rehydration
2,500L	25hL	75L	5L (2.5L juice + 2.5L water)	1L
10,000L	100hL	300L	10L (10L juice + 10L water)	2L

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