



INOBACTER

BACTERIA

Oenological bacteria with re-activation and acclimatisation phases (starter). **For very low pH musts and wines.**



OENOLOGICAL APPLICATIONS

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

INOBACTER is used following a three stage protocol (reactivation, starter, seeding the vat) which enables bacteria to adapt to the lowest pHs.

As the winemaker chooses, the bacteria can be added to the must, during alcoholic fermentation or at the end of it.

The very great tolerance of this strain under extreme conditions guarantees total effectiveness for breaking down malic acid.



CHARACTERISTICS

• Revivifiable population > 1.10⁹ CFUs/g of powder.

Strain of *Oenococcus oeni* selected by the Comité Interprofessionnel du Vin de Champagne.

- Particularly tolerant of low pHs (from 2.9)
- Optimal temperature ranges: 18-22°C
- Alcohol up to 14% by vol
- Free $SO_2 < 10 \text{ mg/L}$
- Total $SO_2 < 60 \text{ mg/L}$
- Low production of volatile acidity.
- Limited production of diacetyl.
- No production of biogenic amines.

The INOBACTER strain does not originate from, and does not come into contact during any of the production processes, with genetically modified organisms.

Every batch is thoroughly inspected by the CIVC.



DOSE RATE

• 0.72 g of bacteria/hL of wine or 4 g/L of reactivation medium.



PACKAGING AND STORAGE

INOBACTER is a kit containing a sachet of oenological bacteria and a sachet of special activator.

 \bullet Kits for seeding 25 hL, 100 hL, 500 hL, 1,000 hL and 2,000 hL of must or wine.

INOBACTER must be kept cold. The powder retains its characteristics for at least 36 months (which is its shelf life) from the date of production if kept at -18° C and at least 18 months when stored at $+4^{\circ}$ C.

However open sachets must be used immediately because the freeze-dried powder is hygroscopic and the bacteria very quickly lose their activity.

The packaging in aluminium sachets keeps the bacteria out of contact with oxygen and moisture.



INOBACTER

INSTRUCTIONS FOR USE

1- Initiate alcoholic fermentation of the yeast starter (PC):

- Must settled from the first day of harvest, little sulphite addition, not chaptalised:
- pH=3,2 3,3.
- Volume: at least 3% of the volume of the vats to be inoculated.
- Addition of:
- Active dry yeasts (ADY) activated beforehand: 20 à 30 g/hL,
- ACTIVIT: 50g/hL
- Fermentation temperature: 20 to 25°C.

2- Reactivate the bacteria:

Two possible reactivation techniques:

- on non-sulphited must from the second fraction of pressing
- on wine (total $SO_2 < 40 \text{ mg/L}$).
- Reactivation mix (MR):
- must or wine + non-chlorinated water: volume indicated in the table.
- température: 25°C.
- Add the activator and mix well.

• Rehydration medium:

- required volume taken from the reactivation mix (see table)
- addition of the bacteria
- if reactivation in must: addition of ADY [20-30g/hL].
- Incorporate this rehydration mix into the total reactivation volume, mix.
- Maintain at 23-25°C.
- The reactivation medium is ready when malic acid is < 1g/L (after 72h on must)

INOBACTER kit	Total reactivation volume (must or wine + water)	Volume to be taken for rehydratation
25 hL	2,5L + 2,5L eau	1L
100 hL	10L + 10L eau	2L
500 hL	50L + 50L eau	5L
1000 hL	100L + 100L eau	10L
2000 hL	200L + 200L eau	20L

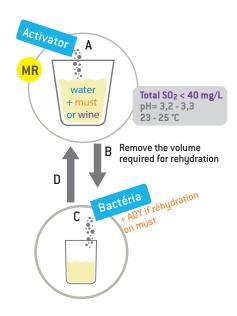
3- Yeast starter

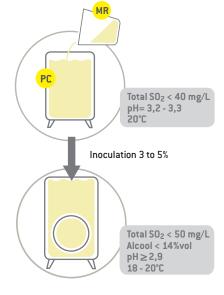
- When the reactivation medium is ready, introduce it into the yeast starter, even if alcoholic fermentation has not completed.
- Maintain the temperature at 20°C.
- The yeast starter is ready when 2/3 of the malic acid have been consumed, i.e. a total drop in acidity of 1 to 2 g/L of H2SO4.

4- Tank inoculation

- Incorporate the yeast starter at a rate of 3 to 5% into the tanks either following AF (sugars < 2 g/L), with or without racking, or earlier before AF completion.
- Maintain at 18-20°C.
- Never leave a tank to drain.
- Carry out a control after 3 weeks at the top and bottom of the tank.







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The information contained in this document is that which we dispose of to the best of our knowledge at this time. Users are still obliged to take their own precautions and carry out their own trials. All current regulations must be scrupulously observed.