Practical Guide to Vinification

No. 6

Good Practices for Malolactic Bacteria

▶ Why?

- Proper rehydration and inoculation of lactic bacteria is a crucial step for their survival and malolactic activity.

Key Points

▶ **IMPACT OF CHLORINE.** Lactic bacteria are highly sensitive to the chlorine in tap water. Consequently, spring water or mineral water must be used for rehydration for direct inoculation bacteria (MBR®). With 1-Step® bacteria kits the impact of chlorine is neutralized by the presence of the specific rehydration activator, therefore rehydration can be carried out with normal drinking water.

▶ **RESPECT TEMPERATURES INDICATED.** Recent studies carried out by Lallemand have demonstrated the importance of temperature during rehydration and fermentation on malolactic activity and the survival of the bacteria. Respecting the recommended temperature for each step is vital.

▶ **RESPECT TIME LIMITS.** The lactic bacteria must not lack malic acid for too long, whether during rehydration or acclimatization, or their population will rapidly decrease.

▶ **USE A NUTRIENT OR BACTERIAL ACTIVATOR IF NECESSARY.** In case of nutritional deficiency or a wine in which it is difficult to start malolactic fermentation.

Lactic Bacteria Inoculation Step by Step

Direct Inoculation Bacteria

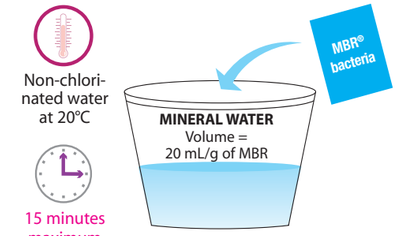
MBR® process direct inoculation

1-STEP Acclimatization Kits

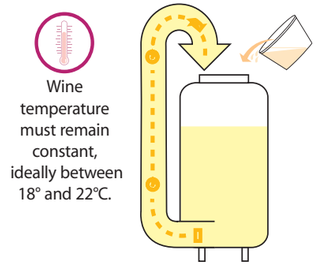
1-STEP®

Remove bacteria packets from freezer 30 minutes before use.

1 Add MBR® lactic bacteria (1 g/hL of wine or must) and dilute carefully.

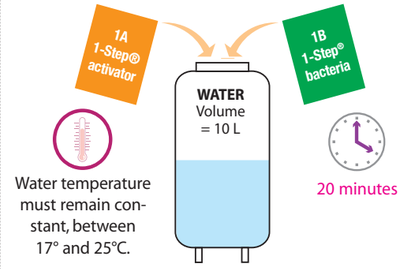


2 Avoiding excessive air, stir this bacteria starter into the wine/must until evenly mixed.

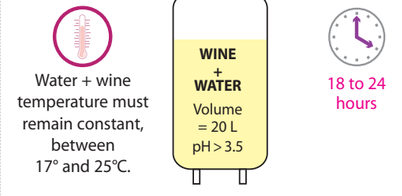


1A Stir specific 1-Step® activator (dosage for 100 hL) into water.

1B Carefully stir in 1-Step® bacteria (dosage for 100 hL).



2 Double the volume with the wine/must to be inoculated.



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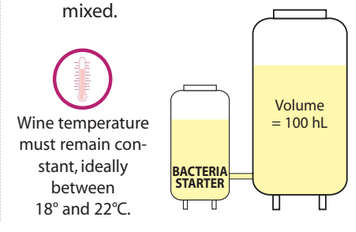

Regularly monitor MLF (using malic acid analysis every 2 to 4 days).

LALLEMAND

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