



MaloLactic Chromatography (MLC)

The simplest analytic to determine, qualitatively, the fermentation process of malic acid in wines.

Contains

- | | |
|--------------------------------|--------------|
| · 1 chromatographic bell glass | ref. 3026205 |
| · 1 support | ref. 1012009 |
| · 1 developer bottle | ref. 1012006 |
| · 1 pack of paper (50 uts.) | ref. 1012007 |
| · 2 petri plates | |
| · 25 plastic micropipettes | ref. 1012010 |
- [required time: +/- 2+4 hours]



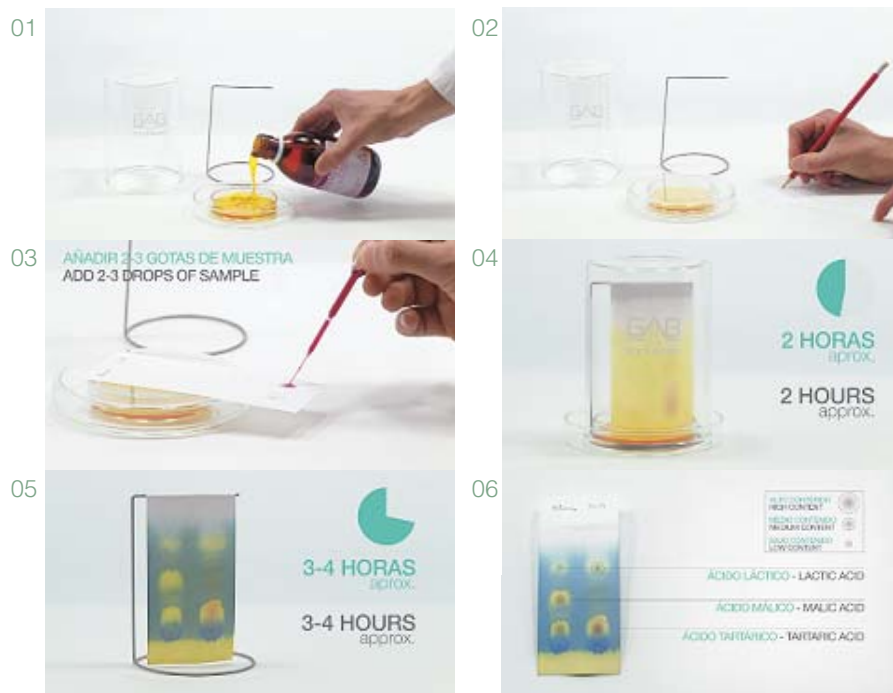
Instructions

The technique applied

- 01 Place **base 1** on the table. In its interior place **base 2**, smaller, and inside this one, drop the **developer liquid** up to the half of its volume. Finally cover it with the bell glass.
- 02 Take a chromatographic paper. Place it on the support and bend it observing that the lowest part of the paper leaves a separation of 2 mm regarding the table.
- 03 Mark a cross, with a pencil, the center where the samples will be dropped, equidistants between them, and about 15 mm from the bottom part of the paper. On the top write down the sample description.
- 04 Then place the paper on the border of clean surface leaving floating half of it. Use the micropipettes to place 2-3 drops of sample over the crosses from before trying to dry them with **(hot) air** between each drop.
- 05 Once dried withdraw the bell glass and hung the paper on its support setting this one around **base 2** ensuring that paper is dived in the developer.
- 06 It is covered again with the bell and it is let to ascend the developer liquid until it almost reaches the top part.
- 07 Once finished withdraw the paper and let it dry in an airy place and in absence of acid vapours.
- 08 Once well dried yellow spots could be observed over a blue background spread all over each sample.
- 09 The wine's acids separate each other following the order from down to up: tartaric, malic and in the top part lactic (and succinic).

Observations

- Keep the developer liquid covered with **cover 2** and again with **cover 1**, or keep it in another bottle for further chromatographies.
- Keep the paper well closed in a dry place and in absence of acid atmospheres or humidity otherwise background will be yellowish or bluish basic atmospheres.
- For more information please visit www.gabsystem.com, call to +34938171842 or write to gab@gabsystem.com. Only in GAB you will receive the best assesment from our products.



There is available CML paper of 10x15 cm. [Ref. I012002], a wider paper in which 5 to 6 samples are hold saving operation time. It is rolled by himself with an office clip and it is continued as in the following photos:

