

Testing Malic Acid with Sentia™

The ability to accurately monitor malic acid during malolactic fermentation is a crucial tool to prevent microbial growth and ensure wine stability. In addition, testing malic acid throughout the winemaking process arms the winemaker with meaningful information on the overall balance of acids that contribute to the sensory characteristics of the wine.

The Sentia malic acid buffer solution is required to accurately dilute wine for the analysis of malic acid on the Sentia analyzer.

This guide will detail the recommended procedure to dilute a sample using the Sentia malic acid buffer solution, prior to testing for malic acid on the Sentia analyzer.



Sample Type:

Red or white still wine

Measuring Range:

0.05 g/L – 5 g/L

Materials and Equipment Required:

Sentia analyzer

Sentia malic acid test strips

Sentia malic acid buffer solution

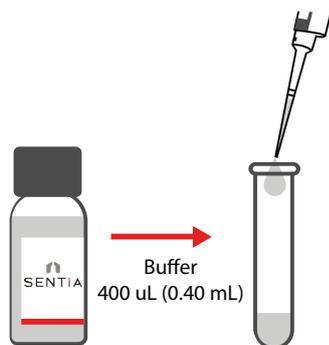
100 - 1000 uL micro-pipette

Micro-pipette tips

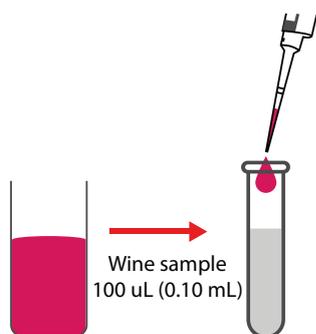
Test tube with cap (plastic, size 5 mL or less recommended)

Sample preparation:

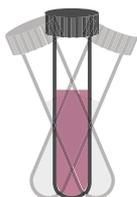
Before samples are analyzed for malic acid, they must be first diluted one in five with the Sentia malic acid buffer. This means 1 part wine mixed with 4 parts buffer. Samples can be diluted for up to 30 minutes prior to testing. Alternative dilution solutions should not be used. Refrain from combining buffer solutions from different bottles to avoid changes to the buffer concentration. Please check the buffer solution bottle for date of manufacture or best before date before use.



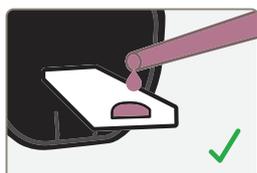
1. Using a micro-pipette, accurately pipette 400 uL (0.4 mL) of Sentia malic acid buffer solution into a clean test tube.
2. Dispose of the pipette tip.



3. Fit a new pipette tip onto the micro-pipette.
4. Accurately pipette 100 uL (0.1 mL) of wine sample into the test tube.
5. Dispose of the pipette tip.



6. Cap the test tube, and gently shake to mix.



7. You now have a one in five diluted wine sample ready to apply to the test strip. Analyze sample within 30 minutes of mixing.

8. Once the test is complete, dispose of the remaining buffered wine solution by pouring down the sink with running water.