

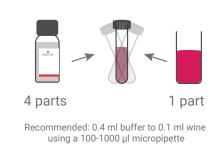
Measure malic acid in less than a minute

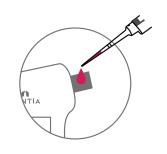
The ability to accurately monitor malic acid during malolactic fermentation is a crucial tool to prevent microbial growth and ensure wine stability. With Sentia, it's never been easier.

After a simple 1 in 5 pre-dilution with the Sentia malic acid buffer, in less than a minute you'll have an accurate and reliable malic acid result.











- Fast and reliable results, allowing for the tracking of malic acid in just 45 seconds
- No multiple pipetting of reagents or reagent preparation, resulting in reduced user error
- No time wasted performing calibrations and blank tests
- Fewer plastic consumables required, making Sentia environmentally and cost friendly
- No annual maintenance
- Automatic calculation no spreadsheets or further processing required
- Small sample volume required minimum 8 μl



A validation study at the Australian Wine Research Institute (December 2021)

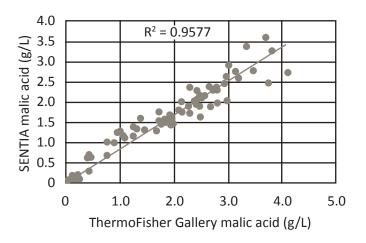
The below validation study conducted at the Australian Wine and Research Institute compares the Sentia malic acid test strip against a NATA accredited reference method for L-malic acid on the ThermoFisher Gallery.

Regression Statistics

| Observations | 107 |
|--|----------|
| Standard error | 0.25 g/L |
| Coefficient of determination (R ²) | 0.96 |

Repeatability

| Range | Standard Deviation | Coefficient of Variation |
|--------------|-----------------------|-----------------------------|
| 0.05 - 1 g/L | 0.03 | - |
| 1.01 - 5 g/L | - | 5% |



How does Sentia compare to other malic acid methods?

| | SENTIA | Benchtop Enzymatic Kit | External Laboratory | Discrete Analysers | FTIR Units |
|---|---|--|------------------------|--------------------------------|--------------------------------|
| Cost per test | \$6.00 USD | \$4.00 USD | \$26.00 USD | \$0.30 USD | \$0.25 USD |
| Time per test | 45 seconds | 15 minutes | 1-2 working days | 10 minutes | 1 minute |
| Reagents per test | One | 4-5 | N/A | 4-5 | None |
| Equipment required | • SENTIA device • Micro-pipette | • Spectrophotometer • 2 x Micro-pipettes | N/A | • Discrete Analyser | • FTIR Unit |
| Equipment cost | \$1,950 USD | \$2,500 USD | N/A | \$18,000-\$100,000 USD | \$50,000-\$180,000 USD |
| Annual equipment maintenance required? | No | Yes | N/A | Yes (~\$5,000 USD per year) | Yes (~\$5,000 USD per year) |
| Plastic consumables required per test | Test tubePipette Tip | CuvettesPipette tipsTest tubeParafilm | N/A | Cuvettes Sample cups | • Sample cups |
| Plastic consumables cost per test | \$0.15 USD | \$0.25 USD | N/A | \$0.35 USD | \$0.15 USD |
| Calibration required? | No | No | N/A | Yes | Yes |
| Blank test required? | No | Yes | N/A | No | No |
| Automatic result calculation? | Yes | No | N/A | Yes | Yes |