

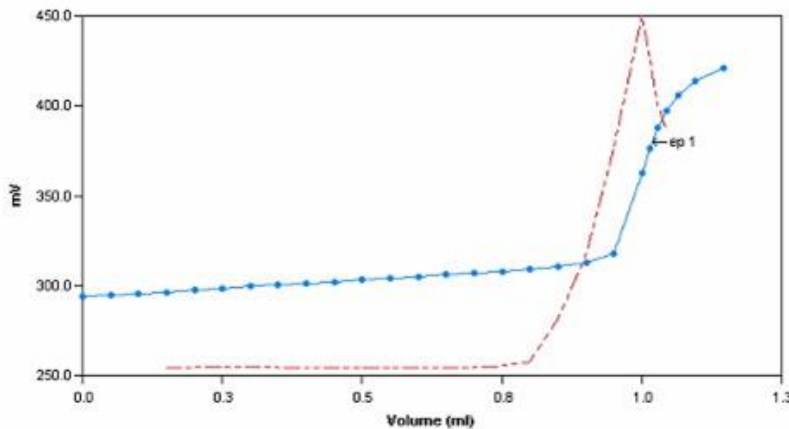
Method Abstract #17

Free and Total Sulfites in Wine

Scope and Application This method determines the concentration of free and total sulfites in wine. It conforms to AOAC Official Method 892.02.

Method Summary Sulfite analysis involves the titration of wine samples with potassium iodate using a redox electrode. For total sulfite determination only, sodium hydroxide is added to the samples first, followed by a ten minute waiting period. Following this, sulfuric acid and potassium iodide are added to the samples prior to titration. Free sulfite determination is done similarly, without the sodium hydroxide addition.

Sample Titration Curve



Method Performance

Parameter	Specification
Measuring Range*	0.8 – 800ppm
RSD for red wine sample (21.63ppm free sulfite)	2.40% or +/- 0.52 ppm
RSD for white wine sample (25.90ppm free sulfite)	1.10% or +/- 0.28 ppm
RSD for rose wine sample (48.76ppm total sulfite)	1.93% or +/- 0.94 ppm

*This measuring range was determined by analyzing laboratory prepared standards formulated from sodium thiosulfate. The measuring range may be increased by using larger capacity analysis vessels and/or auto-dilution.