

FACTSHEET: TOTAL SULFUR DIOXIDE SPECTROPHOTOMETER TEST KIT

Sulfur dioxide is used as a preservative in wine and there are restrictions limiting the amount that can be added in most wine producing countries. This test kit is a fast and easy way to determine the amount of total sulfur dioxide in wine samples, without the need for the laborious setup associated with traditional methods. This method can be used for both white and red wines.

PRINCIPLE OF MEASUREMENT

The amount of sulfite present in wine is measured by monitoring the reaction with a chromogen under basic conditions. The reduction of the chromogen leads to formation of a strongly absorbing compound which can be measured at 340 nm. The measured amount of the activated chromogen is stoichiometrically proportional to the amount of total sulfite present.

TEST PERFORMANCE (n = 101, white and red wines)

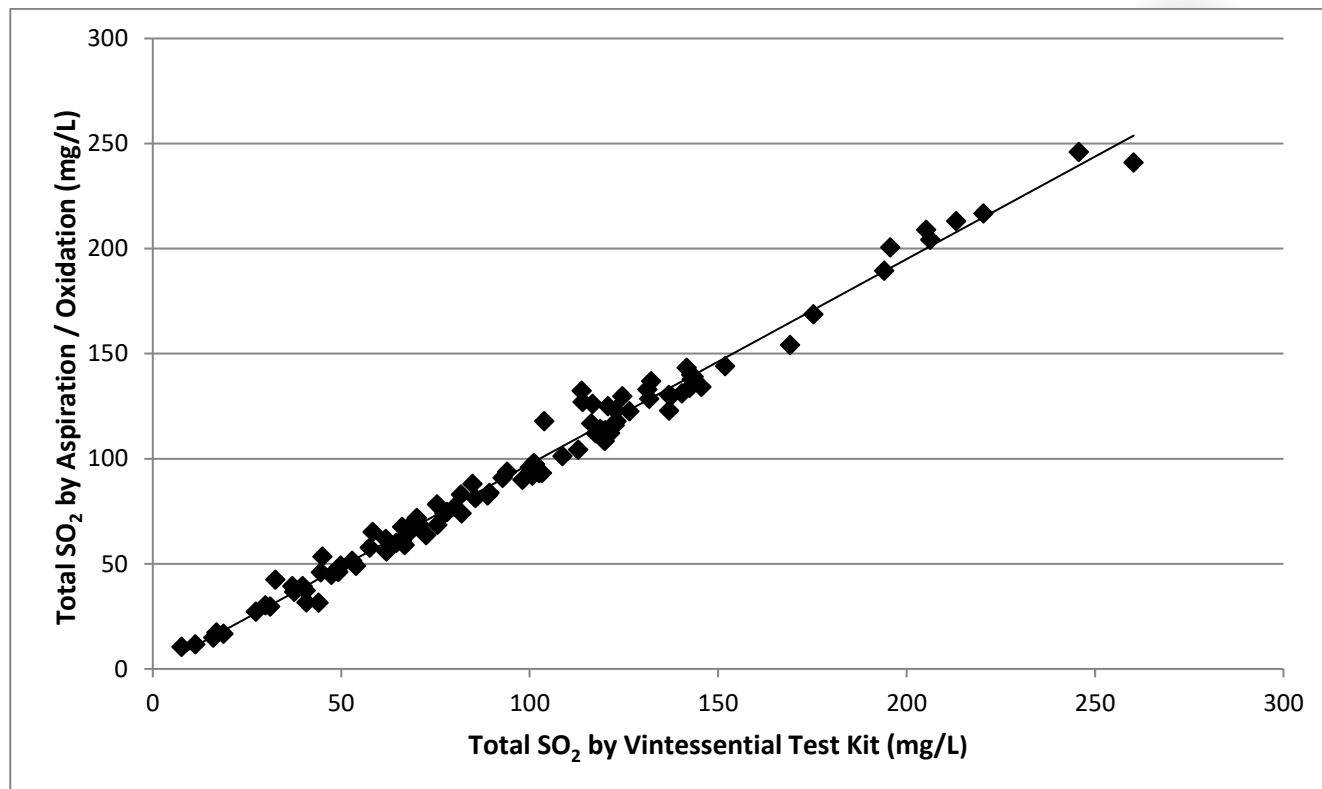
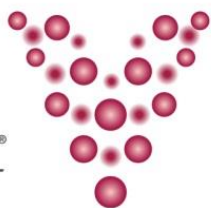
Average difference between test kit and aspiration oxidation = 3 mg/L (SD 6 mg/L)

Correlation between test kit and aspiration oxidation: $R^2 = 0.99$

Repeatability (CV) = 0.63 %
(SD) = 0.58 mg/L

Reproducibility (CV) = 1.87 %
(SD) = 1.72 mg/L

Linearity = 10 – 200 mg/L



ITEMS REQUIRED BUT NOT SUPPLIED

	Item code*
Semi-micro cuvettes	2C890
Spectrophotometer	2S120 or 2S140
Micropipette	2P398 and 2P399
Pipette tips	2P500 and 2P502
Parafilm	2P140
Distilled water	1W002 / 1W022

* *Vintessential items available within Australia only*

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