

Here is an Email from Doyle Souders ([doylesouders@me.com](mailto:doylesouders@me.com)) on his evaluation of the SC-100. In the data he provides below, "Ripper" values refer to numbers generated on the SC-100; AO refers to values done by an aeration oxidation setup, and Titret refers to the store-bought Titret ampoules. - Rich

On 11/4/2010 9:32 AM, Doyle Souders wrote:

Hi Rich,

I am sold on your instrument! There was Good news and Bad news. The Good news was that your instrument correlated within 1-4 ppm of my AO measurements. The bad news was that the wines I tested all had lower sulfite levels than I expected. The fact that the AO system is so slow and it takes a major portion of a day to test multiple wines has put me in a position where I do not test as much as I should. Your instrument will solve that problem.

2009 Zinfandel

Ripper 1 = 24 ppm  
Ripper 2 = 24 ppm  
AO = 24 ppm  
Titret = 40 ppm  
Ripper 3 = 24 ppm

On Ripper 3, I wanted to use my Magnetic stirrer but found the amount of liquid was not sufficient to be able to use the stirrer without it constantly hitting the probe so I added 25 ml of DI water to the wine. The reading as you can see came out the same as the first two Ripper tests. I am on a bit of unsure ground with doing this as I don't know if there is some additional dissociation that could occur because of the added DI Water and whether that would affect the readings. [Note: it is fine to add up to 25 mL pure water as Doyle did here -R] I will do more tests on that this weekend.

2009 Petite Syrah

Ripper 1 = 16 ppm  
Ripper 2 = 18 ppm  
AO = 15 ppm

I picked the Petite because it is a very dark and heavy red. As such I figured it might have the most error due to the various anthocyanin and phenol reactions. I did not see that in the results and literature I have read seems to indicate that the short test time significantly reduces that error.

2006 Chardonnay

Ripper = 16 ppm  
AO = 15 ppm  
Titret = 24 ppm

I also tested a friends wine that was clearly oxidized. As expected, 1 drop of Titrant indicated that there was no sulfite in the wine.

*Here is a follow-up Email from Doyle with more comparative data - Rich*

Hi Rich,

I received the results back from the Vinqury panels on the commercial wine. In looking at the Vinqury Website, it appears that their test method for Free SO<sub>2</sub> is by Segmented Flow Analysis. I am not familiar with the details of that methodology but your instrument correlates very closely with the results we received.

Here are the results of those tests.

	pH	SC-100	SC-100	Vinqury
Red Table Wine	3.61	8 ppm	7 ppm	8 ppm
Sangiovese	3.82	13 ppm	13 ppm	12 ppm
Merlot	3.5	4 ppm	4 ppm	2 ppm
Cabernet Sauvignon	3.75	9 ppm	9 ppm	9 ppm
Malbec	3.78	6 ppm	7 ppm	8 ppm

As you can see, all of the results were within 2 ppm. Again excellent correlation.

Best Regards,

Doyle Souders