



How to Measure SO_2

1 Prepare and Calibrate

- Remove the protective cap from the probe.
- Ensure that the fill hole screw cap is removed.
- Make sure that the probe has sufficient fill solution.
- Reads correctly in the ORP test solution.
- Ensure that the burette and tubing are primed with titrant. Use a waste beaker to collect dispensed titrant as it is priming.
- Precisely add pump calibration standard or titrant standard to a clean beaker.
- Add 5 mL of the acid reagent to the beaker.
- Add potassium iodide to the sample beaker.
- Rinse the ORP electrode with deionized water and immerse into the sample until the reference junction is completely submerged.
- Insert the dosing tip into the sample, until submerged approximately 0.1".
- Begin titrating immediately with iodate.
- Update the titrator with the calibration value.

2 Measure

Free SO_2

- Use a clean pipette to precisely add 50 mL of wine to a clean 100 mL beaker.

Total SO_2 (only)

- Add 5 mL of alkaline reagent, cover the beaker and swirl. Allow the sample to sit for approximately 10 minutes.
- Using the 20 mL beaker, add 5 mL of the acid reagent to the sample.
- Add potassium iodide to the sample beaker.
- Rinse the ORP electrode with deionized water and immerse into the sample until the reference junction is completely submerged. Be sure that the tip of the electrode is not hitting the stir bar.
- Begin titrating immediately with iodate.

3 Clean and Store

- After measuring samples, unclip the ORP electrode from holder and rinse
- Ensure all wine stains are removed
- Examine the ORP electrode - refill if the level of the internal solution is less than 1/2 inch from the fill hole
- Empty, rinse, and refill the electrode with fill solution if wine/must is present inside the ORP electrode
- Fill a small beaker with cleaning solution for wine deposits or wine stains
- Immerse the ORP electrode for 5 to 15 minutes with junction covered
- Fill the storage cap of the ORP electrode to the halfway point with storage solution
- Replace the storage cap on the electrode
- Make sure there is enough storage solution in the cap to cover the junction of the ORP electrode