

BUFFERS

Never re-use buffers

Calibrate regularly with a fresh pour of each buffer, recap and store. pH 10 buffer, in particular, will drift in a matter of hours due to carbon dioxide absorption. Check the expiration date on your buffers.

RINSING

Rinse electrode tip well between readings

Use distilled water and never rub the bulb or blot it to dryness.

FILL LEVEL

Check electrode fill level

If you have a refillable electrode be sure to check your fill level. It should be at least 1 inch (2.5 cm) above the solution being measured. Open the fill hole before calibration and measurement. For optimal performance, always maintain a fully filled electrode and be sure to close fill hole during storage.

CLEANING

Clean your electrode regularly

Cleaning a dirty, clogged or coated electrode can restore proper electrode performance and prolong the useful life of the electrode. Use the correct cleaning solution appropriate to the samples being measured.

STORAGE

Store your electrode properly in pH storage solution

Never store in distilled, deionized, or tap water. With refillable electrodes, close the filling hole for storage. Keep the electrode upright if possible.

TEMPERATURE

Record temperature along with your pH

The temperature of your sample can have an effect on the pH. Ensure the temperature has stabilized on the probe before taking a reading and always record this along with the pH. Use a triode or automatic temperature compensation (ATC) probe to achieve accurate, comprehensive results.

CALIBRATE

Calibrate and check the pH slope and offset regularly

Calibrate with 2 or more buffers. Check that the slope is greater than 92% (53.5 mV/pH at 20C) and the offset is +/- 59 mV. If your pH meter does not display offset, measure the mV in freshly poured pH 7 buffer.

For increased confidence in your results, verify the calibration by reading a known buffer solution. If the reading is within your acceptance limits, the calibration is good.



TIPS FOR PERFECT pH

Find out more at thermofisher.com/perfectpH

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