

Method Abstract #99 pH

Scope and Application

This method conforms to Standard Method 4500-H^+ B, ISO 10523, NF T 90-008 and ASTM D 1293. It is a measure of the relative acidity or basicity of a solution measured on a scale of 0 to 14

Method Summary

pH is measured directly by a pH electrode that records the voltage difference between the solution and a reference electrode contained within the probe. The voltage measured from the samples is compared to a calibration curve to determine the H⁺ concentration.

Sample Calibration Curve

Method Performance

Parameter	Specification
Measuring Range	0 – 14*
RSD for 4 buffer	+/- 0.002
RSD for 7 buffer	+/- 0.0007
RSD for 10 buffer	+/- 0.0006
RSD for Tap water	+/- 0.0065

RSD values are better than those specified in Standard Methods.

^{*}The pH measuring range is based on aqueous samples. The pH range may be expanded to (-)9 - 23 pH units if required.