

pH

SEAL Application ML-902

▶ SCOPE AND APPLICATION

This method covers the determination of pH in drinking, surface, and saline waters, domestic and industrial wastes.

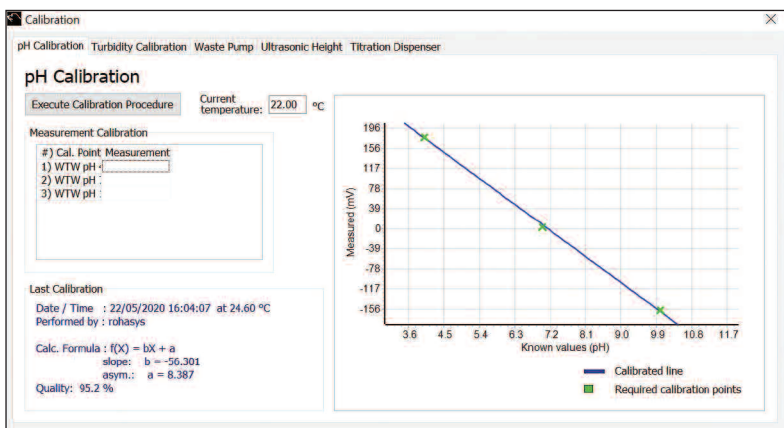
Applicable Range: 0.00 – 14.00

This method is equivalent to Standard Method 4500-H+B, ISO 10523, NF T 90-008 and ASTM D 1293.

▶ METHOD DESCRIPTION

Power of Hydrogen (pH) is the measurement of H⁺ ion concentration in a sample. It is expressed on the pH scale of 0 to 14. The pH is measured using a combined glass electrode. The voltage value detected is then compared with the calibration curve generated to determine the pH of the sample.

▶ METHOD PERFORMANCE & QC DATA



▶ pH Probe Information

Accuracy:
± 0.100

Electrode Type:
RedRod / Refillable Reference Element

Range:
0.000 – 14.000

Resolution:
0.001 / 0.010 / 0.100

Temperature Accuracy:
± 0.3° C (± 0.54° F)

Temperature Range:
-10 – 100° C (14 – 212° F)

Temperature Resolution:
0.10° C (0.18° F)

pH	Average	RSD (%) **
4.00	4.01	0.035
7.00	7.00	0.010
10.00	10.01	0.009

** Relative standard deviation (RSD) calculated by dividing the standard deviation by the mean and multiplying by 100.

Temperature Variation: ± 0.3° C Only for use with conductivity above 100 µS/cm.

This data was collected using the Hach pH probe CH375. Other probes are available.