Measuring pH value
Possible test procedures.

Overview of common procedures for measuring the pH value of water - from test strips via indicator solutions to digital and laboratory measuring devices. Each explains accuracy, calibration and the required minimum conductivity.

Litmus and test strips

These indicators are intended for urine. For tap water and mineral water only conditionally suitable. There are considerable measurement tolerances. For distilled water or water from reverse osmosis systems, this procedure is not suitable, as ions must be contained in the test solution! Usually a value around 5 is displayed, but this is incorrect! A minimum conductivity of 200-300 µS is required.

Indicator solutions

These indicators are suitable for tap water and mineral water. However, there are also measurement tolerances here. For distilled water or water from reverse osmosis systems, this procedure is not suitable, as ions must be contained in the test solution! Usually a value around 5 is displayed, but this is incorrect! A minimum conductivity of 200-300 µS is required.

Digital pH value measuring devices

These measuring devices (costing between 50€ and 140€) are suitable for tap water and mineral water. There are minimal measurement tolerances, however the measuring device must be calibrated with buffer solutions (pH 4 and pH 9) before each measurement. For distilled water or water from reverse osmosis systems, this procedure is not suitable, as ions must be contained in the test solution! Incorrect measurement results are displayed! A minimum conductivity of 200 µS is required.

Laboratory measuring devices

These measuring devices (costing between 200€ and 1,000€) are suitable for tap water and mineral water. There are only very minimal measurement tolerances, however the measuring electrode must be calibrated with buffer solutions (pH 4 and pH 9) before each measurement and then stored in a special solution. For distilled water or water from reverse osmosis

systems, this procedure is not suitable, as ions must be contained in the test solution! Incorrect measurement results are displayed! A minimum conductivity of 100 µS is required.

Special laboratory measuring devices

These measuring devices are suitable for tap water and mineral water. There are only very minimal measurement tolerances, however the measuring electrode must be calibrated with buffer solutions (pH 4 and pH 9) before each measurement and then stored in a special solution. These are specially suitable for distilled water or water from reverse osmosis systems, as no ions need to be contained in the test solution! No minimum conductivity is required.

It's good.
to be truu.