

## **1 pH buffer solutions / conductivity standard 100 µS/cm**

These solutions were produced by Metrohm AG, Herisau, Switzerland.

Their values are traceable to primary pH value reference materials or to primary solutions of electrolytic conductivity of the NIST<sup>1</sup> and the PTB<sup>2</sup>. The batch number of the reference material used for these solutions is listed in the specification.

The pH value or conductance is determined by Metrohm AG and by the DAkkS-certified laboratory<sup>3</sup> independently of one another to ensure the highest accuracy and reliability. This is done using secondary pH value reference materials or reference solutions of electrolytic conductivity. The DAkkS-certified laboratory is accredited for the calibration of pH-value reference materials, pH buffer solutions and reference solutions for electrolytic conductivity.

The two independent measurements must match within the specified measurement uncertainty. The specified measured value was determined by the calibration laboratory. The DKD calibration certificate, which is available at [www.metrohm.com](http://www.metrohm.com), documents traceability to national and international standards. DKD is a signatory to the multilateral agreements of the *European Co-Operation for Accreditation (EA) and of the International Laboratory Accreditation Cooperation (ILAC)*, which ensures the mutual recognition of certificates<sup>4</sup>. National metrology institutes regularly take part in international round-robin tests under the auspices of these agreements. This ensures the international comparability and equivalence of the measurements.

The accreditation certificate of the calibration laboratory and its appendix, along with the detailed scope of accreditation, can be obtained from the DKD homepage at [www.dakks.de](http://www.dakks.de) with the help of the accreditation number that is listed on the certificate.

The pH buffer solutions and conductivity standards from Metrohm are sterile-filtered and bottled under controlled conditions. Additionally, the sachets are tested by a laboratory, which is accredited in accordance with GMP, for microbial contamination pursuant to Ph. Eur. (current version), aerobic germs and microorganisms (2.6.12 and 2.6.13). These tests are performed with different finished-product samples of the production batch. The limit of detection of CFU/g < 1 must not be exceeded.

For more detailed information please contact your Metrohm sales representative.

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<sup>1</sup> National Institute of Standards and Technology, Gaithersburg, USA

<sup>2</sup> Physikalisch-Technische Bundesanstalt, Braunschweig and Berlin, Germany

<sup>3</sup> Calibration laboratory, accredited by DKD according to DIN EN ISO/ IEC 17025:2005

<sup>4</sup> DKD calibration certificates are accepted by other accreditation bodies (e.g. COFRAC) within the European Co-Operation for Accreditation (EA) and the International Laboratory Accreditation Cooperation (ILAC).