

1 pH buffer solutions / conductivity standard 100 $\mu\text{S}/\text{cm}$

These solutions have been 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 NIST¹ and the PTB². The batch number of the reference material used for these solutions is listed in the specifications.

To guarantee highest accuracy and reliability, Metrohm AG and ZMK -ANALYTIK- GmbH, calibration laboratory D-K-15186-01-00³, independently determine the pH value and the conductance using secondary pH value reference materials or secondary reference solutions of electrolytic conductivity. The DKD calibration laboratory D-K-15186-01-00 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 measured value stated has been determined by the calibration laboratory D-K-15186-01-00. The DKD calibration certificate, which is available at www.metrohm.com, documents the traceability to national and international standards. DKD is 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 certificates⁴. Within this framework, the national metrology institutes regularly take part in international round-robin tests. This ensures international comparability and equivalence of the measurements.

The accreditation certificate of D-K-15186-01-00 and the annex, in which the scope of accreditation is detailed, can be found either on the DKD's website at www.dakks.de or on the ZMK -ANALYTIK- GmbH website at www.zmk-wolfen.de.

The pH buffer solutions and conductivity standards are sterile-filtered and bottled under controlled conditions. Additionally, the sachets are tested by UFAG Laboratorien AG (Switzerland, Swissmedic no. 08-187), which is accredited to GMP, for microbial contamination according to Ph. Eur. (current ed.), 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.

¹ National Institute of Standards and Technology, Gaithersburg, USA

² Physikalisch-Technische Bundesanstalt, Braunschweig and Berlin, Germany

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

⁴ 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).