

Certificate of Analysis

Product Name: Buffer Standard pH 4.01 ± 0.01 at 25°C (77°F)
Product Code: HI7004L
Lot Number: 0375
Date of Analysis: 2024.07.05
Best use before: July 2029
Reference Meter: HI5522 pH meter, HI1131B pH probe
Reference Method: ASTM D1293-18

Metrological Traceability:

Calibration: Reference meter calibrated in 2-points by standard solution prepared from primary salts certified reference material SRMs from NIST.

Calibration verification: by standard solution prepared from primary salts certified reference material by ZMK accredited ISO 17034.

Standard solutions are prepared gravimetrically using balances accurate to ±0.0001g, that have been fully qualified and calibrated to ISO 17025 requirements, and deionized water for analytical use ISO 3696/BS 397B. The calibration is carried out at 25°C with thermostatic bath checked by thermometer traceable to the SI.

ZMK-CRM: pH-401 S batch S01/22

ZMK-CRM: pH-741 I-S batch S01/22, pH-741 II-S batch S01/22 mixture

NIST SRM: 185i

NIST SRM: 186-I-g, 186-II-g mixture

ZMK: Zentrum für Messen und Kalibrieren & ANALYTIK GmbH, Germany.

NIST: National Institute of Standards and Technology, Gaithersburg, USA.

Intended use: This reference material is intended for use as a calibration standard for pH meters or electrodes or as a control sample for measuring the pH value.

Uncertainty U: The uncertainty interval represents the expanded uncertainty with a coverage factor of 2 and represents the 95% level of confidence.

Specifications:

Standard Value	Mean Value	Measurement Unit	Passed
4.01	4.01	pH	√

Date of Issue: 2024.07.05

Reference Number: 05G44

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