

Certificate of Analysis

Product Name: Buffer Solution pH 4.01 ± 0.01 at 25°C (77°F)
Product Code: HI7004L
Lot Number: 3309
Date of Analysis: 2026.05.05
Expiry Date: May 2031
Reference Meter: HI6000 pH Meter, HI1131B pH probe
Reference Method: ASTM D1293-18

**Metrological
Traceability:**

Calibration: Reference meter calibrated in 2-points with standard solution prepared from primary salts, certified reference material from NIST.
Calibration verification with standard solution prepared from primary salts certified reference material from ZMK, accredited DIN EN ISO 17034:2017. Standard solutions are prepared gravimetrically using balances accurate to ±0.0001g, that have been fully qualified and calibrated in compliance with SR EN ISO/IEC 17025:2018 requirements, and deionized water for analytical use in compliance with SR EN ISO 3696:2002. Calibration and verification are carried out at 25°C with thermostatic bath checked by thermometer traceable to the SI.
ZMK-CRM: pH-741 I-S batch 01/24, pH-741 II-S batch S 01/24 mixture
ZMK-CRM: pH-401 S batch S 01/24
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 pH buffer solution is intended for use as a calibration standard for pH meters or electrodes or as a control sample for measuring the pH value.

Accreditation: Hanna Instruments Testing Laboratory is accredited for pH testing by the Romanian Accreditation Authority RENAR, with certificate nr. LI 1282 in accordance with SR EN ISO/IEC 17025:2018.

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: 2026.05.06

Laboratory Manager: Tulbure Eugenia



CoA_7004x_rev.1.2_March 2025