HANNA instruments

# Certificate of Analysis

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|---|---|
| Product Name: | Buffer Standard pH 4.01 ± 0.01 at 25°C (77°F) |
| Product Code: | HI7004/1L |
| Lot Number: | 0198 |
| Date of Analysis: | 2024.05.29 |
| Best use before: | May 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 3978. 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: 2024.05.29
Reference Number: 29E43
Technical Manager: Eugenia Tulbure



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Hanna Instruments Inc. 584 Park East Drive Woonsocket, RI 02895
www.hannainst.com