

**Product:** Buffer pH 10.00 (Blue)**Issue Date:** 01/09/2020**Item Number:** B0470-10.00B**Lot #:** 200109A**Expires:** (1.5yr) 07/2021**Product Description and Intended Use:** For calibration of analytical instruments and/or validation of analytical methods**Actual Sample Value and Associated Uncertainty:**

Buffer pH 10.00 ± 0.01 (pH9.99 – 10.01)\*. pH values change according to temperature as follows:

| °C | 10    | 20    | 30   | 40   | 50   |
|----|-------|-------|------|------|------|
| pH | 10.15 | 10.05 | 9.96 | 9.87 | 9.80 |

\*Testing performed on-site at Exaxol's QC laboratory using in-house procedures for all standardized solutions. These results were obtained in an environment of 25°C ± 1°C with an RH of 40%-60% and relate only to the item specified on this certificate.

**Homogeneity:** Solutions are mixed according to in-house procedures and are guaranteed to be homogeneous.**Storage and Handling:** Store in an ambient environment (15°C - 30°C). Keep product capped to avoid evaporation, which could alter the certified value.**NIST Traceability and Measurement Procedure for Defined Measurands:**

Traceable to NIST SRM 186Ilg, 186Ilg, 191d and NIST Class S weights, calibrated via Test #FL-14057, according to NIST Handbook 145: Standard Operating Procedures Number 5: 3-1 Weight Design. Environmental conditions (temperature and humidity) is monitored with a NIST traceable thermometer and hygrometer. Exaxol Reference Materials are also Traceable to NIST Certified SRM's through an unbroken chain of comparisons.

Per ASTM E288 requirements, Exaxol uses strictly Class A pipettes and volumetric glassware, maintained in accordance with ASTM E542-01. Exaxol calibrates their balances using certified Class S NIST weights certified by the State of Florida Metrology Laboratory. Calibration records are maintained on site. All glassware and pipettes are also pre-calibrated and operated using the guidelines set forth by ASTM E542-01.

Exaxol is compliant with ISO 17025 and ISO 17034 standards. Exaxol solutions and standards are made in accordance with Exaxol's documented ISO 9001:2015 Quality Management System. Production records and test results are maintained and secured in the laboratory's Manufacturing Log, according to lot number.



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