



## **CERTIFICATION REPORT - ISO 17034 CERTIFIED REFERENCE MATERIAL**

**PRODUCT:** Buffer Standard pH 5.00 @ 20 °C

**PRODUCT NO:** CRM1050

**LOT NO:** CRM105023K1

**DATE OF MANUFACTURE:** 11 October 2023

**EXPIRY DATE:** 28 October 2026

**SPECIFICATION:** pH 4.99 - 5.01 @ 20 °C

**CERTIFIED VALUE:** pH 5.00 ± 0.03 @ 20 °C

### **Intended Use:**

This Certified Reference Material is intended primarily as either a calibrant or analytical control solution for use in pH determination.

### **TRACEABILITY IN THE PRODUCTION OF THIS STANDARD:**

This product was manufactured and certified in accordance with the requirements of ISO 17034. Both solute and solvent were weighed on balances calibrated by Reagecon engineers using SI traceable mass standards. Reagecon holds ISO 17025 accreditation for calibration of non-automatic weighing machines (A2LA #6739-02). The resulting Balance Certificates of Calibration were issued in accordance with the requirements of ISO 17025.

Calibration of the pH meter instruments upon which all testing was performed is NIST traceable.

As a further control the mean value determined from the homogeneity samples for each batch is checked against the assigned value. If the values do not agree within the uncertainty of test method LAB-P-TPAPHAPH the batch is rejected.

### **UNCERTAINTY OF THE ASSIGNED VALUE:**

The reported uncertainty was calculated in compliance with ISO 17034 and includes uncertainty contributions due to the value Assignment, the homogeneity of the filled batch and the stability of the solution over time. It is calculated with a coverage factor of 2 (k=2) to provide a confidence level of approximately 95 %.

An allowance has been made for transport conditions in the computation of the assigned uncertainty.

### **ASSESSMENT OF HOMOGENEITY:**

The homogeneity of the batch was verified by analysis of randomly selected samples taken at the time of manufacture, with the analysis being carried out using an in-house test method. This product is homogeneous provided that the instructions for use are followed.

**CERTIFICATION REPORT (continued)****LOT NO:** CRM105023K1**STABILITY OF THIS CERTIFIED REFERENCE MATERIAL:**

The stability of this reference material is assured until the expiry date, provided that the instructions for use are followed. This reference material will be monitored throughout its shelf life and any changes in value will be reported to all purchasers.

**COMMUTABILITY:**

This Certified Reference Material is intended primarily as either a calibrant or analytical control solution for use in pH determination. Commutability to other measurement methods has not been assessed.

**ACCREDITATION:**


Reagecon Diagnostics Ltd is accredited by A2LA, under scope 6739.03 for the referenced test method (ISO 17025).

Reagecon Diagnostics Ltd is accredited by A2LA, under scope 6739.02, for the calibration of non-automatic weighing machines (ISO 17025).

Reagecon Diagnostics Ltd is accredited by A2LA, under scope 6739.01, for Certified Reference Materials (ISO 17034).

**INSTRUCTIONS FOR USE:**

- Prior to use, the bottle should be brought to room temperature and mixed thoroughly by inversion to ensure a homogeneous mix.
- Product must be stored at +15°C to +30°C when not in use.
- NOTICE AND WARNING TO USERS :- These instructions for use must be followed to assure the assigned stability.
- Refer to the product Safety Data Sheet for detailed safety information regarding this product.

Approved Signatory:	Leo Geary	Technical Services Chemist	
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**CERTIFICATE ISSUE DATE:** 31 October 2023  
**CERTIFICATE ISSUE NUMBER:** 1

This certificate must not be reproduced except in full.