Certificate of Analysis

ACCREDITED
CERT #6739.03

pH Buffer Standard

DIN Buffer Standard pH 7.413 ± 0.010 @ 25°C

Product No:	107413	Date of Measurement:	03/09/2024
Lot No:	742924H1	Date of Sample Receipt:	03/09/2024
Expiry Date*:	28/08/2026	Date of Manufacture*:	03/09/2024

Specification:

7.403 - 7.423 @ 25°C

Mean Measured Value:

7.414 pH @ 25°C

Method:
The result reported above was determined by analysis of a sample of this lot taken at time of manufacture. Test Method used was TPPHB. Measured with a combination glass electrode after multiple point calibration with reference materials. This certificate relates solely to the sample as received by the laboratory, bearing the product code and lot number given above. The uncertainty of measurement has been calculated not to exceed ± 0.010pH at 95% confidence level, i.e. coverage factor k =2.

Metrological Traceability:
The test result is traceable to Standard Reference Material of National Institute of Standards and Technology (USA), SRM 185i Potassium Hydrogen Phthalate, SRM 186-I-g Potassium Dihydrogen Phosphate and SRM 186-II-g Disodium Hydrogen Phosphate.

Compliance:
This Test Method is in accordance with IUPAC Recommendations 2002 Measurement of pH. Definition, Standards and Procedures.

Accreditation:
Reagecon Diagnostics Ltd. is accredited to ISO 17025 by the American Association for Laboratory Accreditation, under scope 6739.03, for the test method, TPPHB, used to generate the above result. This accreditation deems Reagecon competent on a quality systems level and a technical level to perform the tests on the scope of accreditation. Reagecon has the Quality Management Systems in place to ensure that each individual test result generated using TPPHB is technically valid and is supported by appropriate uncertainty measurements.

Date of Issue of the Certificate :

04/09/2024

QC Laboratory Techinician

ONDIANO Gabriel

gabriel

All raw materials used to prepare this product are of high purity.
*The detail above is based on information supplied in writing by Reagecon Manufacturing.
Tested by Reagecon Quality Control Laboratories for Reagecon Manufacturing

Reagecon Diagnostics Ltd. - Shannon Free Zone, Co, Clare, Ireland.
Tel +353 61 472622, Fax: +353 61 472642 - Email: sales@reagecon.ie, www.reagecon.com

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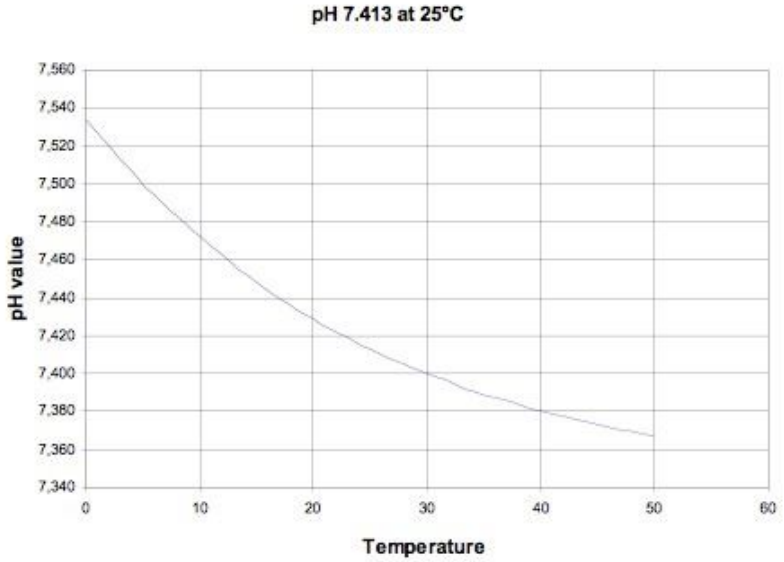

TEMP. (°C)	pH VALUE	TEMP. (°C)	pH VALUE
0	7,534	33	7,393
1	7,527	34	7,391
2	7,520	35	7,389
3	7,514	36	7,388
4	7,507	37	7,386
5	7,500	38	7,384
6	7,494	39	7,382
7	7,489	40	7,380
8	7,483	41	7,379
9	7,478	42	7,377
10	7,472	43	7,376
11	7,467	44	7,374
12	7,462	45	7,373
13	7,458	46	7,372
14	7,453	47	7,371
15	7,448	48	7,369
16	7,444	49	7,368
17	7,440	50	7,367
18	7,436		
19	7,432		
20	7,429		
21	7,425		
22	7,422		
23	7,419		
24	7,416		
25	7,413		
26	7,410		
27	7,407		
28	7,405		
29	7,402		
30	7,400		
31	7,398		
32	7,396		

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Certificate of Conformity and Traceability
pH 7.413 ±0.010 (k=2) - 25°C

Traceability:
Traceable to NIST pH scale. Certified Reference material from National Institute of Standards & Technology (NIST) - Nominal value pH 6.864 @ 25°C. The exact value of this standard was determined with an expanded uncertainty of ± 0.002pH by NIST using a standard Hydrogen Electrode Apparatus.

Certified Value:
pH 7.413 ±0.010 (k=2) - 25°C The limits of expanded uncertainty are given to guarantee a confidence level of ~95% (k=2). This uncertainty reflects the combined effects of measurement errors, operator errors and equipment errors.

Stability:
When stored under Good Laboratory practice the certified value is valid for the extent of the products shelf life whether opened or unopened.

Measurement:
The certified value was determined by measurements of samples with dedicated electrodes under thermostated conditions using a high-resolution meter traceable to primary standards.

Composition:
Potassium Dihydrogen Phosphate 9mmol/L
Disodium Hydrogen Phosphate 30mmol/L
Added germicide < 0.01%

Formulation:
Specified by NIST, IUPAC and DIN19266.

Preparer:
Reagecon Diagnostics Ltd.

Intended Use:
Standard pH solution for calibration of pH measurement chains.

Preparation of standard:
Potassium Dihydrogen Phosphate, Food Grade and Disodium Hydrogen Phosphate ACS grade was dissolved and mixed without loss in purified water. Germicide was added. The solution was protected from evaporation and contamination until bottling.

Storage:
Before use: store in unopened bottle.
After opening: store in capped bottle in normal atmospheric conditions at a temperature between 5°C and 30°C.

Recommended Use:
First use: Write the opening date on the bottle using an indelible pen or appropriate label.
Use a clean dry beaker for taking an aliquot for calibration and cap bottle as soon as aliquot is taken.
Never pour the used aliquot back into the bottle. Always follow Good Laboratory Practice.
For accurate measurements at a temperature other than 25°C, refer to the table above when calibrating your meter.

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