M

Certificate of Analysis

Certipur® Certified Reference Material

Producer: Merck KGaA, Frankfurter Str. 250, 64293 Darmstadt, Germany

Accreditation: The laboratory of Merck KGaA, Darmstadt, Germany for reference

materials in titrimetry is accredited as calibration laboratory according to

DIN EN ISO/IEC 17025.

Description of CRM: Potassium hydrogen phthalate

Ordering number: 1.02400.0080

Lot number: 172400B

Composition: Potassium hydrogen phthalate

Certified value and uncertainty: 100.00 % ± 0.05 %

Mass fraction in weight percent with expanded measurement uncertainty

The expanded measurement uncertainty *U* is calculated as

 $U = k \cdot u_{\text{characterisation}}$, where k = 2 is the coverage factor for a 95% coverage probability and $u_{\text{characterisation}}$ is the combined measurement uncertainty in

accordance to DIN EN ISO/IEC 17025.

Method of analysis: The certified mass fraction was determined by potentiometric titration with

sodium hydroxide as titration solution. The certified value is based on a

molecular mass M = 204.222 g/mol dried substance.

Traceability: This volumetric standard is directly traceable to the corresponding primary

standard NIST SRM® potassium hydrogen phthalate 84L. NIST: National Institute of Standards and Technology, Gaithersburg, USA.

Storage: Store at +15 °C to +25 °C tightly closed in the ori ginal container and

protect from light and moisture.

Application and correct use: This volumetric standard is intended for standardisation of volumetric

solutions in accordance to the chapter reagents of the Pharmacopoeia (Ph. Eur., USP). The volumetric standard potassium hydrogen phthalate

must be dried at 120 ℃ for 2 hours before use.

Date of release: 2017/12/12

Minimum shelf life: 2022/12/31

Dipl.-Ing. Ayfer Yildirim (Laboratory Manager)

A. Yildirim