SIGMA-ALDRICH

Eluent Concentrate

for Ion Chromatography

Certificate

This certificate is designed in accordance with ISO Guide 31 [1]

Object of certification: **Sodium carbonate concentrate, IC eluent concentrate (20x) for Metrosep A Supp 7**

Fluka Product No.: **72784 (Lot BCBR3458V)**

Composition: 72 mM sodium carbonate (puriss. p.a., ACS reagent, >99.5%, anhydrous, Prod. No. 71350) dissolved in high purity water (18.2 MΩ·cm, 0.2 µm filtered)

Certified value traceable to NIST and BAM certified reference materials and uncertainty according to ISO Guide 35 [2] and Eurachem/CITAC Guide [3]		
Constituent	Certified value at 20 °C	Expanded uncertainty [$U = k \cdot u_c$; $k = 2$]
Carbonate [CO_3^{2-}]	**71.9 mmol/L**	**0.4 mmol/L**

Intended use: Concentrate for preparation of eluents for ion chromatography

Storing and handling: This eluent concentrate solution shall be stored between 5 °C and 30 °C. To avoid evaporation and CO_2 uptake the bottle should be equipped with a CO_2 absorbent unit immediately after opening.

Expiry date: JAN 2018 (unopened bottle)

Traceability statement: This eluent concentrate solution is traceable by potentiometric titration to NIST SRM 723 and also traceable to BAM certified titrimetric reference material (SIAL Prod. No. 93440).

Uncertainty calculation: All uncertainties are calculated according to Eurachem/CITAC Guide and reported as combined expanded uncertainties at the 95% confidence level. Contributions from reference material, potentiometric titration measurements and storing effects are included in the reported uncertainty budget.

Certification body	Quality Release Date	Quality System
K.-D. Schmidt, Ph.D.	12 FEB 2016	SQS Reg. No. 16368-02

[1] ISO Guide 31, 2nd Ed. (2000), "Reference Materials - Contents of certificates and labels"

[2] ISO Guide 35, 3rd Ed. (2006), "Reference Materials - General and statistical principles for certification"

[3] Eurachem/CITAC Guide, 3rd Ed (2012), "Quantifying Uncertainty in Analytical Measurement"

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