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

CERTIFICATE OF GRAVIMETRIC PREPARATION

PRODUCT: IC Multi-Ion Standard, 5 ions mixed concentrations in H_2O

PRODUCT No.: ICAS501

LOT NO.: AS50125B1

DATE OF PREPARATION: 13th February 2025

EXPIRY DATE: 28th February 2027

DENSITY VALUE: 0.999 g/mL @ 20 °C

PREPARATION OF STANDARD:

All standard components have been pre-qualified/verified before use. All analytical measuring devices and instrumentation have been pre-calibrated. The actual concentrations reported below are based on this preparation methodology and compound impurities.

Elements	Nominal mg/kg	Actual mg/kg	Actual mg/L @ 20 °C
Chloride (as Cl^-)	100.1	100.1	100.0
Fluoride (as F^-)	100.1	100.1	100.0
Nitrate (as NO_3^-)	200.3	200.6	200.3
Phosphate (as PO_4^{3-})	200.3	200.3	200.0
Sulphate (as SO_4^{2-})	200.3	200.7	200.5

The expanded uncertainty (k=2) due to weighing, volumetric preparation and homogeneity is calculated in compliance with EURACHEM/CITAC Guide: Quantifying Uncertainty in Analytical Measurements as ± 0.2 %. All values are verified by IC analysis using externally sourced ISO 17034 accredited Certified Reference Materials as calibrants/quality controls where possible.

TRACEABILITY IN THE PRODUCTION OF THIS STANDARD:

This product was prepared gravimetrically on a mass/mass basis, using balances calibrated by Reagecon engineers with mass standards traceable to the National and International primary standard of mass. Reagecon holds ISO 17025 accreditation for calibration of non-automatic weighing machines. The resulting Balance Certificate of Calibration was issued in accordance with the requirements of ISO/IEC 17025. The balance was calibrated under monitored environmental conditions and atmospheric pressure. Tests were performed for capacity, readability, repeatability, eccentricity, and linearity.

TEST METHOD:

The mean result of this standard was verified using a calibrated IC system according to an in-house test method. The result reported in this certificate was confirmed by analysis of a sample of this lot taken at time of manufacture. The density of this standard was determined using a high-performance calibrated density meter.

This certificate relates solely to the lot number given above.

Approved By: QC Supervisor

Date: 25th February 2025