

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:** Concentrate to make Chloride Standard 5000900

in accordance with European Pharmacopoeia

**PRODUCT No.:** 5000900C

**MATRIX:**  $H_2O$ 

**LOT NO.:** 590024A1

**DATE OF PREPARATION:** 10<sup>th</sup> January 2024

**EXPIRY DATE:** 28<sup>th</sup> January 2025

**DENSITY VALUE:** 0.999 g/ml @ 20°C

### PREPARATION OF CONCENTRATE:

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.

Analyte	Raw Material	Nominal mg/L	Actual mg/kg
Chloride, as Cl	Sodium Chloride	800	801 ± 0.2 %

## 801 mg/kg is equivalent to 800 mg/L @ 20°C.

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  $\pm$  0.2 %. All values are verified by IC analysis using externally sourced ISO 17034 accredited Certified Reference Materials as calibrants/quality controls where possible.

### DILUTION INSTRUCTIONS FOR PREPARATION OF EP 5000900 (8ppm Cl aq.)

- 1. To prepare EP 5000900 (Chloride, 8ppm as Cl) dilute this solution to 100 times it's volume with purified water.
- 2. Prepare the dilute solution immediately before use.

### TRACEABILITY IN THE PRODUCTION OF THIS STANDARD

This product was prepared gravimetrically on a mass/mass basis. The solute was weighed on a balance calibrated by Reagecon engineers using 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 inhouse 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 Technician

June Honav Ane

Date: 12th January 2024

This certificate must not be reproduced except in full.