

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 Standard Formate 1000 mg/L (as HCO <sub>2</sub> ) |  |
|----------------------|--|--|
| PRODUCT No.:         | ICAS34   |  |
| MATRIX:              | H <sub>2</sub> O                                     |  |
| LOT NO.:             | ICAS3424G1   |  |
| DATE OF PREPARATION: | 01 <sup>st</sup> July 2024                           |  |
| EXPIRY DATE:         | 28 <sup>th</sup> July 2025                           |  |
| 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.

| Analyte                      | Raw Material   | Nominal mg/L | Actual mg/kg     |
|------------------------------|----------------|--------------|------------------|
| Formate, as HCO <sub>2</sub> | Sodium Formate | 1000         | $1001 \pm 0.2$ % |

#### 1001 mg/kg is equivalent to 1000 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.

# TRACEABILITY IN THE PRODUCTION OF THIS STANDARD:

This product was prepared gravimetrically on a mass/mass basis, using a balance 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 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 highperformance calibrated density meter.

This certificate relates solely to the lot number given above.

Approved By: QC Technician

gabriel

Date: 17<sup>th</sup> July 2024

This certificate must not be reproduced except in full.