

CERTIFICATE OF GRAVIMETRIC PREPARATION

PRODUCT: Zinc Standard Solution, 1000 mg/L, acc. to Ph. Eur. in H₂O
PRODUCT No.: 5003401C
LOT NO.: 5341C25E1
DATE OF PREPARATION: 27th May 2025
EXPIRY DATE: 28th May 2026
DENSITY VALUE: 1.001 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
Zinc, as Zn	Zinc Sulphate	1000	1001 ± 0.2 %

1001 mg/kg is equivalent to 1002 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 ± 0.2 %. All values are verified by ICP-MS analysis using externally sourced ISO 17034 accredited Certified Reference Materials as calibrants/quality controls where possible.

DILUTION INSTRUCTIONS FOR PREPARATION OF Ph. Eur. 5003401 (100ppm Zinc aq.):

1. To prepare Ph. Eur. 5003401 (Zinc 100 ppm) dilute this solution to 10 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, 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 ICP-MS 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 Technician



Date: 04th June 2025

This certificate must not be reproduced except in full.