

Certificate of Analysis

ULTRAgrade™ Ion Chromatography Solution: 1000 µg/mL Tartrate

Catalog Number: ICC-030

Lot Number: CM-4650

Lot Issue Date: 09/02/2015

Expiration Date: 10/31/2019

Starting Material: potassium tartrate dibasic hemihydrate

Starting Material Purity: 99%

Starting Material Lot No.: RM08055

Matrix: low TOC water (< 50 ppb)

Certified Value: 1002 ± 2 µg/mL

This Certified Reference Material (CRM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system. The analyte concentration(s) were prepared and verified by an ISO Guide 34 / ISO 17025 accredited laboratory and compared to calibration standards independently prepared using NIST SRM(s). The certified value and uncertainty value at the 95% confidence level for each analyte is determined gravimetrically.

Confirmation by Ion Conductivity (IC) vs. Second Source (CRM)

Confirmation by Inductively Coupled Plasma Spectroscopy (ICP / ICP-MS) vs. NIST SRM 3141a

ULTRA uses purified acids, 18 megohm double deionized water, calibrated Class A glassware & meticulously cleaned bottles in the manufacturing of ULTRAgrade standards. Balances used in the manufacturing of this standard are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001.