

Certificate of Analysis

ULTRAgrade™ Ion Chromatography Solution: 1000 µg/mL Lactate in low TOC water (< 50 ppb)
Catalog Number: ICC-021
Lot Number: R01037
Job Number: J00017031
Lot Issue Date: 09/27/2013
Expiration Date: 10/31/2017

Starting Material: sodium lactate
Starting Material Purity: 98%
Starting Material Lot No.: BH01329
Matrix: low TOC water (< 50 ppb)

Certified Value: 1001 ± 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)

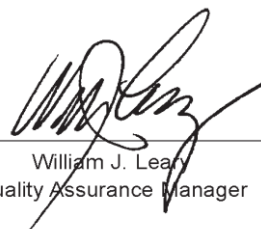
Confirmation by Inductively Coupled Plasma Spectroscopy (ICP / ICP-MS) vs. NIST SRM 3152a

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.



ISO 17025:2005
Accredited
A2LA
Cert. No. 0851.01

ISO 9001:2000
Registered
TUV USA, Inc.
Cert. No. 06-1004


William J. Leary
Quality Assurance Manager