

Certificate of Analysis

ULTRAgrade™ Ion Chromatography Solution: 1000 µg/mL Chlorate in water

Catalog Number: ICC-011

Lot Number: P00611

Job Number: J00014784

Lot Issue Date: 06/14/2012

Expiration Date: 07/31/2016

Starting Material: Potassium Chlorate
Starting Material Purity: 99.999%
Starting Material Lot No.: NT00423
Matrix: low TOC water (< 50 ppb)

Certified Value: 1001 ± 5 µg/mL

This Certified Reference Material (CRM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system. The analyte concentrations were verified by our ISO 17025 accredited laboratory to be within ± 2.5%, when 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 Chromatography (IC) vs. Second Source (CRM)

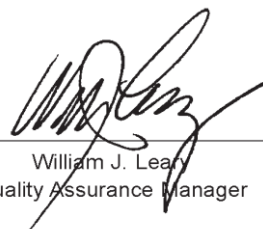
Confirmation by Inductively Coupled Plasma Spectroscopy (ICP / ICP-MS) vs. NIST SRM 3141a

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.



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