

# Certificate of Analysis

**Thallium  
AA Standard**

**Catalog Number: IAA-081  
Lot Number: D00738Z  
Job Number: J00003191  
Lot Issue Date: 05/30/2008  
Expiration Date: 07/31/2015**

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  $\pm 2.5\%$ , when compared to calibration standards independently prepared using NIST SRM(s). The certified value and uncertainty value for each analyte is determined gravimetrically.

Analyte	True Value	Analytical Method	NIST SRM
thallium	10000 $\pm$ 50 $\mu\text{g/mL}$	ICP / ICP-MS	3158

Matrix: 2% nitric acid in low TOC water (< 50 ppb)

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  
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TUV USA, Inc.  
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