SOLUTIONS FOR YOUR STANDARDS

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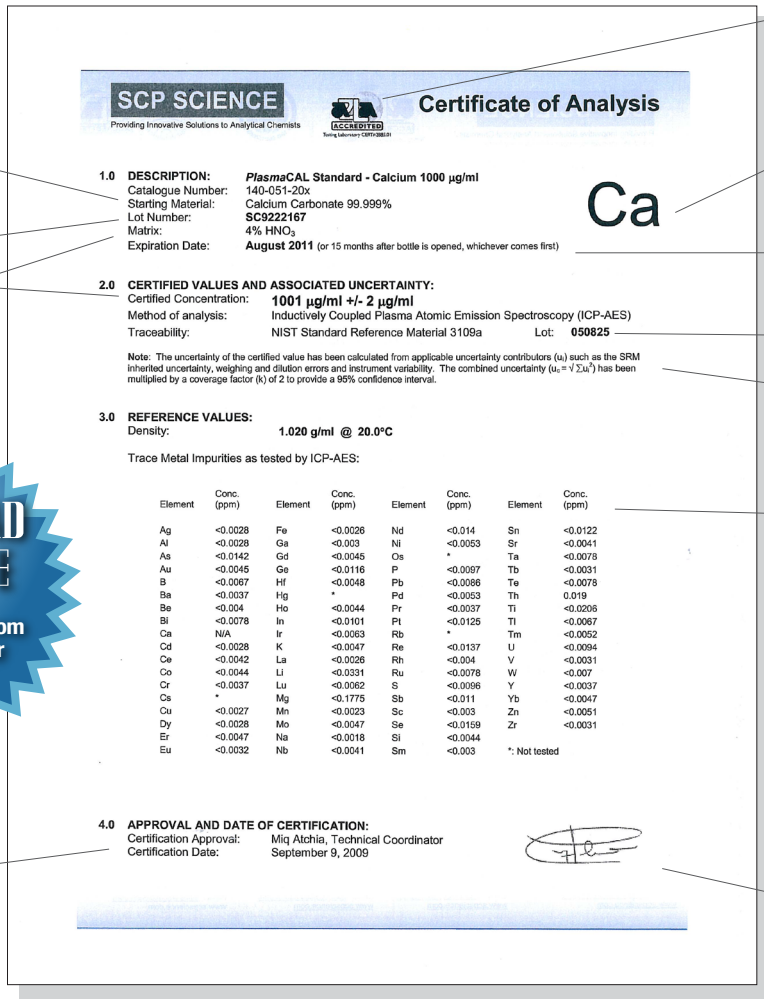
*Plasma*CAL Single Element ICP-AES & MS Calibration Standards

*Plasma***CAL** Single Element Calibration Standards (1000 & 10 000 µg/ml) for ICP and ICP-MS are packaged for the economic needs of the modern laboratory. Multiple volumes and extended expiry dates ensure that maximum cost efficiency is achieved. Standards are manufactured following an ISO 9001:2008 Quality Assurance Program.

- 3 Volumes Available: (2x25 ml, 125 ml & 500 ml)
- 2 expiry dates* (up to 24 months unopened & 15 months opened)
- Longer shelf life for unopened bottles
- Tested against NIST 3100 Series, standards, direct traceability to NIST
- Confidence in long-term stability and accuracy

** Osmium (Os) and Vanadium (V) have an expiry date of 12 months opened and 15 months unopened.*

A SAMPLE OF OUR COMPREHENSIVE CERTIFICATE OF ANALYSIS



SCP SCIENCE
Providing Innovative Solutions to Analytical Chemists
ACCREDITED
Certificate of Analysis

1.0 DESCRIPTION: ***Plasma*CAL Standard - Calcium 1000 µg/ml**
Catalogue Number: 140-051-20x
Starting Material: Calcium Carbonate 99.999%
Lot Number: **SC9222167**
Matrix: 4% HNO_3
Expiration Date: **August 2011** (or 15 months after bottle is opened, whichever comes first)

Ca

2.0 CERTIFIED VALUES AND ASSOCIATED UNCERTAINTY:
Certified Concentration: **1001 µg/ml +/- 2 µg/ml**
Method of analysis: Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP-AES)
Traceability: NIST Standard Reference Material 3109a Lot: **050825**

Note: The uncertainty of the certified value has been calculated from applicable uncertainty contributors (u_i) such as the SRM inherited uncertainty, weighing and dilution errors and instrument variability. The combined uncertainty ($u_c = \sqrt{\Sigma u_i^2}$) has been multiplied by a coverage factor (k) of 2 to provide a 95% confidence interval.

3.0 REFERENCE VALUES:
Density: **1.020 g/ml @ 20.0°C**

Trace Metal Impurities as tested by ICP-AES:

Element	Conc. (ppm)	Element	Conc. (ppm)	Element	Conc. (ppm)	Element	Conc. (ppm)
Ag	<0.0028	Fe	<0.0026	Nd	<0.014	Sn	<0.0122
Al	<0.0028	Ga	<0.003	Ni	<0.0053	Sr	<0.0041
As	<0.0142	Gd	<0.0045	Os	*	Ta	<0.0078
Au	<0.0045	Ge	<0.0116	P	<0.0097	Tb	<0.0031
B	<0.0067	Hf	<0.0048	Pb	<0.0086	Te	<0.0078
Ba	<0.0037	Hg	*	Pd	<0.0053	Th	0.019
Be	<0.004	Ho	<0.0044	Pr	<0.0037	Ti	<0.0206
Bi	<0.0078	In	<0.0101	Pt	<0.0125	Tl	<0.0067
Ca	N/A	Ir	<0.0063	Rb	*	Tm	<0.0052
Cd	<0.0028	K	<0.0047	Re	<0.0137	U	<0.0094
Ce	<0.0042	La	<0.0026	Rh	<0.004	V	<0.0031
Co	<0.0044	Li	<0.0331	Ru	<0.0078	W	<0.007
Cr	<0.0037	Lu	<0.0062	S	<0.0096	Y	<0.0037
Cs	*	Mg	<0.1775	Sb	<0.011	Yb	<0.0047
Cu	<0.0027	Mn	<0.0023	Sc	<0.003	Zn	<0.0051
Dy	<0.0028	Mo	<0.0047	Se	<0.0159	Zr	<0.0031
Er	<0.0047	Na	<0.0018	Si	<0.0044		
Eu	<0.0032	Nb	<0.0041	Sm	<0.003	*: Not tested	

4.0 APPROVAL AND DATE OF CERTIFICATION:
Certification Approval: Miq Atchia, Technical Coordinator
Certification Date: September 9, 2009

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Quality Program registered ISO/IEC 17025:2005

Identification of the actual starting material used

Large symbol for easy retrieval

Lot number for full traceability

Two expiration dates; opened: 15 months; unopened: up to 21 months

Actual concentration & matrix

Direct traceability to NIST

Statement of Uncertainty

Listing of final solution

Date of certification

Signature of the Production Chemist