

ICP-MS/ ICP-OES Standards



Reagecon have been manufacturing Inorganic Standards, Controls and Calibrators for Spectroscopy for almost two decades. During that time, the company has established itself as the most reliable primary producer of top quality standards. Our customer base in over 80 countries is testament of our efforts to be leaders in a changing field where limits of detection and purity are becoming ever more demanding. Whether your application is ICP-MS, ICP-OES or whether you require a single element or multi-element mixture, our products are manufactured, tested and stabilised to such a high level, that they can be used on all of these instruments.

Controlled Environment

Reagecon's standards are manufactured in a highly controlled clean room environment using:

- High purity starting materials
- Ultra-pure water, specially treated for Mass Spectroscopy Standards
- High purity matrix materials
- Pre-leached and pre-cleaned bottles



Options

Reagecon offers more options than almost any other manufacturer.

- Up to 70 single element standards
- Many multi - element mix's
- Several matrices
- Concentration options
- Pack size options
- Customised Standards

All at the highest quality and at an affordable price.

Quality Control

All metal raw materials are assayed by titration and ICP-MS prior to manufacture. Separate CRM's are used to control or calibrate the titration and ICP-MS respectively. This dual process enables the assays to be cross-checked against each other, provides two layers of traceability and quantifies the combined level of impurities in the starting material. The product is then manufactured gravimetrically using the mass balance approach: 100% - sum of all impurities (w/w).

The assay of the final product is certified using the gravimetric result corrected for density. Prior to bottling, the finished product is again tested and verified using an ICP-MS instrument calibrated with appropriate CRM's.

Certification

Reagecon's ICP-MS and ICP-OES Standards are prepared gravimetrically on a weight/weight basis from the purest available raw materials on the market. Both solute and solvent are weighed on balances calibrated by Reagecon's engineers using OIML traceable weights. Reagecon holds ISO 17025 accreditation for calibration of laboratory balances (INAB ref: 265C). The resulting Balance Certificate of Calibration is issued in accordance with the requirements of ISO/IEC 17025.

Traceability

The content of the starting material for each single element or multi-element standard is established by titration. The resulting analysis is directly traceable to a relevant NIST standard where available. All of the resulting uncertainties of measurement are calculated according to EURACHEM/CITAC guidelines and reported as expanded uncertainties at the 95% confidence level. Reagecon have applied for ISO 17025 accreditation for several classes of titrimetric analysis relevant to the assay of Raw Materials, for the manufacture of ICP-MS and ICP-OES standards.

Verification of Raw Materials

The concentration of the target element of each raw material is then verified using a high performance state of the art calibrated ICP-MS instrument. The calibration of the ICP-MS is completed using high purity ISO Guide 34 certified reference materials or other internationally accepted materials (e.g. BAM from Germany). This verification procedure serves three distinct but critical purposes.

- It provides a completely independent check of the accuracy and validity of the titration assay.
- It provides traceability by comparison to a second reference, which is independent from the first Reference Material.
- It determines the level of trace elemental impurities in the starting raw materials.

Elemental Metallic Impurities

All Reagecon Standards are manufactured from the purest available raw materials. At least thirty-three starting materials are metals of > 99.999% purity. Several others are at least 99.995% pure. Most of the remaining metals or salts of metals are at least 99.99% pure. The level of impurities are quantified using ICP-MS and are measured and reported both on the starting materials and on the finished product. All of Reagecon's ICP-MS standards are manufactured in a Class 10,000 (ISO 7) clean room environment.



Final Assay & Result

Each batch of Reagecon's finalised ICP-MS standards are subjected to an assay on the instrument prior to bottling. This assay verifies the target element assay and verifies that the level of impurities have not changed significantly during the manufacturing process. The results are then reported and certified in mg/Kg and mg/L on the basis of weight and the density measurement of the standard. All of the volumetric, titrimetric and gravimetric functions are carried out under a highly regulated temperature regime, using equipment calibrated by Reagecon's engineers. Reagecon holds ISO 17025 accreditation for temperature calibration in the range of -196 to +1200°C (INAB ref: 265C). The density measurements are also highly temperature dependent and are carried out in Reagecon's specialised Density Laboratory. Reagecon is ISO 17025 Accredited, for density measurement using an Oscillating U-Tube Method in accordance with the ASTM D4052-09 method. The company is an extensive producer of density standards.

ICP - MS, ICP Single Element Standards

Product No.	Starting Material and its Purity %	Matrix	Conc $\mu\text{g/ml}$	Pack size
Aluminium				
PAL1A2	AL 99.999	2 - 5% HNO ₃ (v/v)	100	100ml
PAL2A2	AL 99.999	2 - 5% HNO ₃ (v/v)	1,000	100ml
PAL2C2	AL 99.999	2 - 5% HNO ₃ (v/v)	1,000	500ml
PAL4A2	AL 99.999	2 - 5% HNO ₃ (v/v)	10,000	100ml
PAL2A3	AL 99.999	5% HCl (v/v)	1,000	100ml
PAL2C3	AL 99.999	5% HCl (v/v)	1,000	500ml
PAL4A3	AL 99.999	5% HCl (v/v)	10,000	100ml
Antimony				
PSB1A4	Sb 99.999	1% HF + 5% HNO ₃ (v/v)	100	100ml
PSB2A4	Sb 99.999	1% HF + 5% HNO ₃ (v/v)	1,000	100ml
PSB2C4	Sb 99.999	1% HF + 5% HNO ₃ (v/v)	1,000	500ml
PSB4A4	Sb 99.999	1% HF + 5% HNO ₃ (v/v)	10,000	100ml
PSB2A5	Sb 99.999	10% HCl (v/v)	1,000	100ml
PSB2C5	Sb 99.999	10% HCl (v/v)	1,000	500ml
PSB4A5	Sb 99.999	10% HCl (v/v)	10,000	100ml
Arsenic				
PAS1A2	As 99.999	2 - 5% HNO ₃ (v/v)	100	100ml
PAS2A2	As 99.999	2 - 5% HNO ₃ (v/v)	1,000	100ml
PAS2C2	As 99.999	2 - 5% HNO ₃ (v/v)	1,000	500ml
PAS4A2	As 99.999	2 - 5% HNO ₃ (v/v)	10,000	100ml
Barium				
PBA1A2	BaCO ₃ 99.999	2 - 5% HNO ₃ (v/v)	100	100ml
PBA2A2	BaCO ₃ 99.999	2 - 5% HNO ₃ (v/v)	1,000	100ml
PBA2C2	BaCO ₃ 99.999	2 - 5% HNO ₃ (v/v)	1,000	500ml
PBA4A2	BaCO ₃ 99.999	2 - 5% HNO ₃ (v/v)	10,000	100ml
PBA2A3	BaCO ₃ 99.999	2% HCl (v/v)	1,000	100ml
PBA2C3	BaCO ₃ 99.999	2% HCl (v/v)	1,000	500ml
PBA4A3	BaCO ₃ 99.999	2% HCl (v/v)	10,000	100ml
Beryllium				
PBE1A2	BeO 99.99	2 - 5% HNO ₃ (v/v)	100	100ml
PBE2A2	BeO 99.99	2 - 5% HNO ₃ (v/v)	1,000	100ml
PBE2C2	BeO 99.99	2 - 5% HNO ₃ (v/v)	1,000	500ml
PBE4A2	BeO 99.99	2 - 5% HNO ₃ (v/v)	10,000	100ml
Bismuth				
PBI1A6	Bi 99.999	2 - 5% HNO ₃ (v/v)	100	100ml
PBI2A6	Bi 99.999	2 - 5% HNO ₃ (v/v)	1,000	100ml
PBI2C6	Bi 99.999	2 - 5% HNO ₃ (v/v)	1,000	500ml
PBI4A6	Bi 99.999	2 - 5% HNO ₃ (v/v)	10,000	100ml

Product No.	Starting Material and its Purity %	Matrix	Conc µg/ml	Pack size
Boron				
PB1A7	H ₃ BO ₃ 99.99	H ₂ O	100	100ml
PB2A7	H ₃ BO ₃ 99.99	H ₂ O	1,000	100ml
PB2C7	H ₃ BO ₃ 99.99	H ₂ O	1,000	500ml
PB4A7	H ₃ BO ₃ 99.99	H ₂ O	10,000	100ml
Cadmium				
PCD1A2	Cd 99.999	2 - 5% HNO ₃ (v/v)	100	100ml
PCD2A2	Cd 99.999	2 - 5% HNO ₃ (v/v)	1,000	100ml
PCD2C2	Cd 99.999	2 - 5% HNO ₃ (v/v)	1,000	500ml
PCD4A2	Cd 99.999	2 - 5% HNO ₃ (v/v)	10,000	100ml
PCD2A3	Cd 99.999	2% HCl (v/v)	1,000	100ml
PCD2C3	Cd 99.999	2% HCl (v/v)	1,000	500ml
Calcium				
PCA1A2	CaCO ₃ 99.995	2 - 5% HNO ₃ (v/v)	100	100ml
PCA2A2	CaCO ₃ 99.995	2 - 5% HNO ₃ (v/v)	1,000	100ml
PCA2C2	CaCO ₃ 99.995	2 - 5% HNO ₃ (v/v)	1,000	500ml
PCA4A2	CaCO ₃ 99.995	2 - 5% HNO ₃ (v/v)	10,000	100ml
PCA2A3	CaCO ₃ 99.995	2% HCl (v/v)	1,000	100ml
PCA2C3	CaCO ₃ 99.995	2% HCl (v/v)	1,000	500ml
PCA4A3	CaCO ₃ 99.995	2% HCl (v/v)	10,000	100ml
Cerium				
PCE1A2	CeO ₂ 99.99	2 - 5% HNO ₃ (v/v)	100	100ml
PCE2A2	CeO ₂ 99.99	2 - 5% HNO ₃ (v/v)	1,000	100ml
PCE2C2	CeO ₂ 99.99	2 - 5% HNO ₃ (v/v)	1,000	500ml
PCE4A2	CeO ₂ 99.99	2 - 5% HNO ₃ (v/v)	10,000	100ml
Cesium				
PCS1A2	CsCl 99.999	2 - 5% HNO ₃ (v/v)	100	100ml
PCS2A2	CsCl 99.999	2 - 5% HNO ₃ (v/v)	1,000	100ml
PCS2C2	CsCl 99.999	2 - 5% HNO ₃ (v/v)	1,000	500ml
PCS4A2	CsCl 99.999	2 - 5% HNO ₃ (v/v)	10,000	100ml
Chromium				
PCR1A2	Cr(NO ₃) ₃ .9H ₂ O 99.99+	2 - 5% HNO ₃ (v/v)	100	100ml
PCR2A2	Cr(NO ₃) ₃ .9H ₂ O 99.99+	2 - 5% HNO ₃ (v/v)	1,000	100ml
PCR2C2	Cr(NO ₃) ₃ .9H ₂ O 99.99+	2 - 5% HNO ₃ (v/v)	1,000	500ml
PCR4A2	Cr(NO ₃) ₃ .9H ₂ O 99.99+	2 - 5% HNO ₃ (v/v)	10,000	100ml
PCR2A3	Cr 99.995	2% HCl (v/v)	1,000	100ml
PCR2C3	Cr 99.995	2% HCl (v/v)	1,000	500ml
PCR4A3	Cr 99.995	2% HCl (v/v)	10,000	100ml
PCR2A7	Cr 99.995	2% HCl (v/v)	1,000	100ml
Cobalt				
PCO1A2	Co 99.995	2 - 5% HNO ₃ (v/v)	100	100ml
PCO2A2	Co 99.995	2 - 5% HNO ₃ (v/v)	1,000	100ml
PCO2C2	Co 99.995	2 - 5% HNO ₃ (v/v)	1,000	500ml
PCO4A2	Co 99.995	2 - 5% HNO ₃ (v/v)	10,000	100ml
PCO4A3	Co 99.995	2% HCl (v/v)	10,000	100ml
PCO4C3	Co 99.995	2% HCl (v/v)	10,000	500ml

Product No.	Starting Material and its Purity %	Matrix	Conc µg/ml	Pack size
Copper				
PCU1A2	Cu 99.999	2 - 5% HNO ₃ (v/v)	100	100ml
PCU2A2	Cu 99.999	2 - 5% HNO ₃ (v/v)	1,000	100ml
PCU2C2	Cu 99.999	2 - 5% HNO ₃ (v/v)	1,000	500ml
PCU4A2	Cu 99.999	2 - 5% HNO ₃ (v/v)	10,000	100ml
PCU2A3	Cu 99.999	2% HCl (v/v)	1,000	100ml
PCU2C3	Cu 99.999	2% HCl (v/v)	1,000	500ml
PCU4A3	Cu 99.999	2% HCl (v/v)	10,000	100ml
Dysprosium				
PDY1A2	DY ₂ O ₃ 99.99+	2 - 5% HNO ₃ (v/v)	100	100ml
PDY2A2	DY ₂ O ₃ 99.99+	2 - 5% HNO ₃ (v/v)	1,000	100ml
PDY2C2	DY ₂ O ₃ 99.99+	2 - 5% HNO ₃ (v/v)	1,000	500ml
PDY4A2	DY ₂ O ₃ 99.99+	2 - 5% HNO ₃ (v/v)	10,000	100ml
Eribium				
PER1A2	Er ₂ O ₃ 99.99+	2 - 5% HNO ₃ (v/v)	100	100ml
PER2A2	Er ₂ O ₃ 99.99+	2 - 5% HNO ₃ (v/v)	1,000	100ml
PER2C2	Er ₂ O ₃ 99.99+	2 - 5% HNO ₃ (v/v)	1,000	500ml
PER4A2	Er ₂ O ₃ 99.99+	2 - 5% HNO ₃ (v/v)	10,000	100ml
Europium				
PEU1A2	Eu ₂ O ₃ 99.999	2 - 5% HNO ₃ (v/v)	100	100ml
PEU2A2	Eu ₂ O ₃ 99.999	2 - 5% HNO ₃ (v/v)	1,000	100ml
PEU2C2	Eu ₂ O ₃ 99.999	2 - 5% HNO ₃ (v/v)	1,000	500ml
PEU4A2	Eu ₂ O ₃ 99.999	2 - 5% HNO ₃ (v/v)	10,000	100ml
Gadolinium				
PGD1A2	Gd ₂ O ₃ 99.995	2 - 5% HNO ₃ (v/v)	100	100ml
PGD2A2	Gd ₂ O ₃ 99.995	2 - 5% HNO ₃ (v/v)	1,000	100ml
PGD2C2	Gd ₂ O ₃ 99.995	2 - 5% HNO ₃ (v/v)	1,000	500ml
PGD4A2	Gd ₂ O ₃ 99.995	2 - 5% HNO ₃ (v/v)	10,000	100ml
Gallium				
PGA1A2	Ga 99.999	2 - 5% HNO ₃ (v/v)	100	100ml
PGA2A2	Ga 99.999	2 - 5% HNO ₃ (v/v)	1,000	100ml
PGA2C2	Ga 99.999	2 - 5% HNO ₃ (v/v)	1,000	500ml
PGA4A2	Ga 99.999	2 - 5% HNO ₃ (v/v)	10,000	100ml
Germanium				
PGE1A7	Ge 99.999	1% HF + 5% HNO ₃ (v/v)	100	100ml
PGE2A7	Ge 99.999	1% HF + 5% HNO ₃ (v/v)	1,000	100ml
PGE2C7	Ge 99.999	1% HF + 5% HNO ₃ (v/v)	1,000	500ml
PGE4A7	Ge 99.999	1% HF + 5% HNO ₃ (v/v)	10,000	100ml
Gold				
PAU1A8	Au 99.998	5% HCl (v/v)	100	100ml
PAU2A8	Au 99.998	5% HCl (v/v)	1,000	100ml
PAU2C8	Au 99.998	5% HCl (v/v)	1,000	500ml
PAU4A8	Au 99.998	5% HCl (v/v)	10,000	100ml
Hafnium				
PHF1A3	Hf 99.9	1% HF + 5% HNO ₃ (v/v)	100	100ml
PHF2A3	Hf 99.9	1% HF + 5% HNO ₃ (v/v)	1,000	100ml
PHF2C3	Hf 99.9	1% HF + 5% HNO ₃ (v/v)	1,000	500ml
PHF4A3	Hf 99.9	1% HF + 5% HNO ₃ (v/v)	10,000	100ml

Product No.	Starting Material and its Purity %	Matrix	Conc µg/ml	Pack size
Holmium				
PHO1A3	Ho ₂ O ₃ 99.999	2 - 5% HNO ₃ (v/v)	100	100ml
PHO2A2	Ho ₂ O ₃ 99.999	2 - 5% HNO ₃ (v/v)	1,000	100ml
PHO2C2	Ho ₂ O ₃ 99.999	2 - 5% HNO ₃ (v/v)	1,000	500ml
PHO4A2	Ho ₂ O ₃ 99.999	2 - 5% HNO ₃ (v/v)	10,000	100ml
Indium				
PIN1A2	In 99.999	2 - 5% HNO ₃ (v/v)	100	100ml
PIN2A2	In 99.999	2 - 5% HNO ₃ (v/v)	1,000	100ml
PIN2C2	In 99.999	2 - 5% HNO ₃ (v/v)	1,000	500ml
PIN4A2	In 99.999	2 - 5% HNO ₃ (v/v)	10,000	100ml
Iridium				
PIR1A8	(NH ₄) ₂ IrCl ₆ 99.998	5% HCl (v/v)	100	100ml
PIR2A8	(NH ₄) ₂ IrCl ₆ 99.998	5% HCl (v/v)	1,000	100ml
PIR2C8	(NH ₄) ₂ IrCl ₆ 99.998	5% HCl (v/v)	1,000	500ml
PIR4A8	(NH ₄) ₂ IrCl ₆ 99.998	5% HCl (v/v)	10,000	100ml
Iron				
PFE1A2	Fe 99.999	2 - 5% HNO ₃ (v/v)	100	100ml
PFE2A2	Fe 99.999	2 - 5% HNO ₃ (v/v)	1,000	100ml
PFE2C2	Fe 99.999	2 - 5% HNO ₃ (v/v)	1,000	500ml
PFE4A2	Fe 99.999	2 - 5% HNO ₃ (v/v)	10,000	100ml
PFE2A3	Fe 99.999	2 - 5% HCl (v/v)	1,000	100ml
PFE2C3	Fe 99.999	2 - 5% HCl (v/v)	1,000	500ml
PFE4A3	Fe 99.999	2 - 5% HCl (v/v)	10,000	100ml
Lanthanum				
PLA1A2	La ₂ O ₃ 99.999	2 - 5% HNO ₃ (v/v)	100	100ml
PLA2A2	La ₂ O ₃ 99.999	2 - 5% HNO ₃ (v/v)	1,000	100ml
PLA2C2	La ₂ O ₃ 99.999	2 - 5% HNO ₃ (v/v)	1,000	500ml
PLA4A2	La ₂ O ₃ 99.999	2 - 5% HNO ₃ (v/v)	10,000	100ml
Lead				
PPB1A2	Pb 99.999	2 - 5% HNO ₃ (v/v)	100	100ml
PPB2A2	Pb 99.999	2 - 5% HNO ₃ (v/v)	1,000	100ml
PPB2C2	Pb 99.999	2 - 5% HNO ₃ (v/v)	1,000	500ml
PPB4A2	Pb 99.999	2 - 5% HNO ₃ (v/v)	10,000	100ml
Lithium				
PLI1A2	Li ₂ CO ₃ 99.997	2 - 5% HNO ₃ (v/v)	100	100ml
PLI2A2	Li ₂ CO ₃ 99.997	2 - 5% HNO ₃ (v/v)	1,000	100ml
PLI2C2	Li ₂ CO ₃ 99.997	2 - 5% HNO ₃ (v/v)	1,000	500ml
PLI4A2	Li ₂ CO ₃ 99.997	2 - 5% HNO ₃ (v/v)	10,000	100ml
PLI2A3	Li ₂ CO ₃ 99.997	2 - 5% HCl (v/v)	1,000	100ml
PLI2C3	Li ₂ CO ₃ 99.997	2 - 5% HCl (v/v)	1,000	500ml
PLI4A3	Li ₂ CO ₃ 99.997	2 - 5% HCl (v/v)	10,000	100ml
Lutetium				
PLU1A2	Lu ₂ O ₃ 99.99	2 - 5% HNO ₃ (v/v)	100	100ml
PLU2A2	Lu ₂ O ₃ 99.99	2 - 5% HNO ₃ (v/v)	1,000	100ml
PLU2C2	Lu ₂ O ₃ 99.99	2 - 5% HNO ₃ (v/v)	1,000	500ml
PLU4A2	Lu ₂ O ₃ 99.99	2 - 5% HNO ₃ (v/v)	10,000	100ml

Product No.	Starting Material and its Purity %	Matrix	Conc µg/ml	Pack size
Magnesium				
PMG1A2	Mg 99.99	2 - 5% HNO ₃ (v/v)	100	100ml
PMG2A2	Mg 99.99	2 - 5% HNO ₃ (v/v)	1,000	100ml
PMG2C2	Mg 99.99	2 - 5% HNO ₃ (v/v)	1,000	500ml
PMG4A2	Mg 99.99	2 - 5% HNO ₃ (v/v)	10,000	100ml
PMG2A3	Mg 99.99	2 - 5% HCl (v/v)	1,000	100ml
PMG2C3	Mg 99.99	2 - 5% HCl (v/v)	1,000	500ml
PMG4A3	Mg 99.99	2 - 5% HCl (v/v)	10,000	100ml
Manganese				
PMN1A2	Mn 99.98	2 - 5% HNO ₃ (v/v)	100	100ml
PMN2A2	Mn 99.98	2 - 5% HNO ₃ (v/v)	1,000	100ml
PMN2C2	Mn 99.98	2 - 5% HNO ₃ (v/v)	1,000	500ml
PMN4A2	Mn 99.98	2 - 5% HNO ₃ (v/v)	10,000	100ml
Mercury				
PHG1A6	Hg 99.999+	2 - 5% HNO ₃ (v/v)	100	100ml
PHG2A6	Hg 99.999+	2 - 5% HNO ₃ (v/v)	1,000	100ml
PHG2C6	Hg 99.999+	2 - 5% HNO ₃ (v/v)	1,000	500ml
PHG4A6	Hg 99.999+	2 - 5% HNO ₃ (v/v)	10,000	100ml
Molybdenum				
PMO1A7	Mo 99.999	2% NH ₄ OH (v/v)	100	100ml
PMO2A7	Mo 99.999	2% NH ₄ OH (v/v)	1,000	100ml
PMO2C7	Mo 99.999	2% NH ₄ OH (v/v)	1,000	500ml
PMO4A7	Mo 99.999	2% NH ₄ OH (v/v)	10,000	100ml
Neodymium				
PND1A2	Nd ₂ O ₃ 99.99	2 - 5% HNO ₃ (v/v)	100	100ml
PND2A2	Nd ₂ O ₃ 99.99	2 - 5% HNO ₃ (v/v)	1,000	100ml
PND2C2	Nd ₂ O ₃ 99.99	2 - 5% HNO ₃ (v/v)	1,000	500ml
PND4A2	Nd ₂ O ₃ 99.99	2 - 5% HNO ₃ (v/v)	10,000	100ml
Nickel				
PNI1A2	Ni 99.999	2 - 5% HNO ₃ (v/v)	100	100ml
PNI2A2	Ni 99.999	2 - 5% HNO ₃ (v/v)	1,000	100ml
PNI2C2	Ni 99.999	2 - 5% HNO ₃ (v/v)	1,000	500ml
PNI4A2	Ni 99.999	2 - 5% HNO ₃ (v/v)	10,000	100ml
Niobium				
PNB1A9	Nb 99.9+	1% HF + 5% HNO ₃ (v/v)	100	100ml
PNB2A9	Nb 99.9+	1% HF + 5% HNO ₃ (v/v)	1,000	100ml
PNB2C9	Nb 99.9+	1% HF + 5% HNO ₃ (v/v)	1,000	500ml
PNB4A9	Nb 99.9+	1% HF + 5% HNO ₃ (v/v)	10,000	100ml
Palladium				
PPD1A8	Pd 99.999	5% HCl (v/v)	100	100ml
PPD2A8	Pd 99.999	5% HCl (v/v)	1,000	100ml
PPD2C8	Pd 99.999	5% HCl (v/v)	1,000	500ml
PPB4A8	Pd 99.999	5% HCl (v/v)	10,000	100ml
Phosphorus				
PP1A7	NH ₄ H ₂ PO ₄ 99.999	0.05% H ₂ SO ₄ (v/v)	100	100ml
PP2A7	NH ₄ H ₂ PO ₄ 99.999	0.05% H ₂ SO ₄ (v/v)	1,000	100ml
PP2C7	NH ₄ H ₂ PO ₄ 99.999	0.05% H ₂ SO ₄ (v/v)	1,000	500ml
PP4A7	NH ₄ H ₂ PO ₄ 99.999	0.05% H ₂ SO ₄ (v/v)	10,000	100ml
PPT1A8	Pt 99.995	5% HCl (v/v)	100	100ml
PPT2A8	Pt 99.995	5% HCl (v/v)	1,000	100ml
PPT2C8	Pt 99.995	5% HCl (v/v)	1,000	500ml
PPT4A8	Pt 99.995	5% HCl (v/v)	10,000	100ml

Product No.	Starting Material and its Purity %	Matrix	Conc $\mu\text{g/ml}$	Pack size
Potassium				
PK1A2	KNO ₃ 99.999	2 - 5% HNO ₃ (v/v)	100	100ml
PK2A2	KNO ₃ 99.999	2 - 5% HNO ₃ (v/v)	1,000	100ml
PK2C2	KNO ₃ 99.999	2 - 5% HNO ₃ (v/v)	1,000	500ml
PK4A2	KNO ₃ 99.999	2 - 5% HNO ₃ (v/v)	10,000	100ml
PK2A3	KCl 99.999	H ₂ O	1,000	100ml
PK2C3	KCl 99.999	H ₂ O	1,000	500ml
PK4A3	KCl 99.999	H ₂ O	10,000	100ml
Praseodymium				
PPR1A2	Pr ₆ O ₁₁ 99.999	5% HCl (v/v)	100	100ml
PPR2A2	Pr ₆ O ₁₁ 99.999	5% HCl (v/v)	1,000	100ml
PPR2C2	Pr ₆ O ₁₁ 99.999	5% HCl (v/v)	1,000	500ml
PPR4A2	Pr ₆ O ₁₁ 99.999	5% HCl (v/v)	10,000	100ml
Rhenium				
PRE1A7	NH ₄ ReO ₄ 99.999	H ₂ O	100	100ml
PRE2A7	NH ₄ ReO ₄ 99.999	H ₂ O	1,000	100ml
PRE2C7	NH ₄ ReO ₄ 99.999	H ₂ O	1,000	500ml
PRE4A7	NH ₄ ReO ₄ 99.999	H ₂ O	10,000	100ml
Rhodium				
PRH1A8	(NH ₄) ₃ RHCl ₆ 99.99	5% HCl (v/v)	100	100ml
PRH2A8	(NH ₄) ₃ RHCl ₆ 99.99	5% HCl (v/v)	1,000	100ml
PRH2C8	(NH ₄) ₃ RHCl ₆ 99.99	5% HCl (v/v)	1,000	500ml
PRH4A8	(NH ₄) ₃ RHCl ₆ 99.99	5% HCl (v/v)	10,000	100ml
Rubidium				
PRB1A2	RbNO ₃ 99.99	2 - 5% HNO ₃ (v/v)	100	100ml
PRB2A2	RbNO ₃ 99.99	2 - 5% HNO ₃ (v/v)	1,000	100ml
PRB2C2	RbNO ₃ 99.99	2 - 5% HNO ₃ (v/v)	1,000	500ml
PRB4A2	RbNO ₃ 99.99	2 - 5% HNO ₃ (v/v)	10,000	100ml
Ruthenium				
PRU1A8	(NH ₄) ₃ RuCl ₆ 99.99	5% HCl (v/v)	100	100ml
PRU2A8	(NH ₄) ₃ RuCl ₆ 99.99	5% HCl (v/v)	1,000	100ml
PRU2C8	(NH ₄) ₃ RuCl ₆ 99.99	5% HCl (v/v)	1,000	500ml
PRU4A8	(NH ₄) ₃ RuCl ₆ 99.99	5% HCl (v/v)	10,000	100ml
Samarium				
PSM1A2	Sm ₂ O ₃ 99.99	2 - 5% HNO ₃ (v/v)	100	100ml
PSM2A2	Sm ₂ O ₃ 99.99	2 - 5% HNO ₃ (v/v)	1,000	100ml
PSM2C2	Sm ₂ O ₃ 99.99	2 - 5% HNO ₃ (v/v)	1,000	500ml
PSM4A2	Sm ₂ O ₃ 99.99	2 - 5% HNO ₃ (v/v)	10,000	100ml
Scandium				
PSC1A2	Sc ₂ O ₃ 99.999	2 - 5% HNO ₃ (v/v)	100	100ml
PSC2A2	Sc ₂ O ₃ 99.999	2 - 5% HNO ₃ (v/v)	1,000	100ml
PSC2C2	Sc ₂ O ₃ 99.999	2 - 5% HNO ₃ (v/v)	1,000	500ml
PSC4A2	Sc ₂ O ₃ 99.999	2 - 5% HNO ₃ (v/v)	10,000	100ml
Selenium				
PSE1A2	Se 99.999	2 - 5% HNO ₃ (v/v)	100	100ml
PSE2A2	Se 99.999	2 - 5% HNO ₃ (v/v)	1,000	100ml
PSE2C2	Se 99.999	2 - 5% HNO ₃ (v/v)	1,000	500ml
PSE4A2	Se 99.999	2 - 5% HNO ₃ (v/v)	10,000	100ml

Product No.	Starting Material and its Purity %	Matrix	Conc $\mu\text{g/ml}$	Pack size
Silicon				
PSI1A9	(NH ₄) ₂ SiF ₆ 99.99	0.05% HF (v/v)	100	100ml
PSI2A9	(NH ₄) ₂ SiF ₆ 99.99	0.05% HF (v/v)	1,000	100ml
PSI2C9	(NH ₄) ₂ SiF ₆ 99.99	0.05% HF (v/v)	1,000	500ml
PSI4A9	(NH ₄) ₂ SiF ₆ 99.99	0.05% HF (v/v)	10,000	100ml
PSI2A7	Na ₂ SiO ₃ 99.9	H ₂ O	1,000	100ml
PSI2C7	Na ₂ SiO ₃ 99.9	H ₂ O	1,000	500ml
PSI4A7	Na ₂ SiO ₃ 99.9	H ₂ O	10,000	100ml
Silver				
PAG1A2	Ag 99.999	2 - 5% HNO ₃ (v/v)	100	100ml
PAG2A2	Ag 99.999	2 - 5% HNO ₃ (v/v)	1,000	100ml
PAG2C2	Ag 99.999	2 - 5% HNO ₃ (v/v)	1,000	500ml
PAG4A2	Ag 99.999	2 - 5% HNO ₃ (v/v)	10,000	100ml
Sodium				
PNA1A2	NaNO ₃ 99.99	2 - 5% HNO ₃ (v/v)	100	100ml
PNA2A2	NaNO ₃ 99.99	2 - 5% HNO ₃ (v/v)	1,000	100ml
PNA2C2	NaNO ₃ 99.99	2 - 5% HNO ₃ (v/v)	1,000	500ml
PNA4A2	NaNO ₃ 99.99	2 - 5% HNO ₃ (v/v)	10,000	100ml
PNA2A3	NaCl 99.999	H ₂ O	1,000	100ml
PNA2C3	NaCl 99.999	H ₂ O	1,000	500ml
PNA4A3	NaCl 99.999	H ₂ O	10,000	100ml
Strontium				
PSR1A2	SrCO ₃ 99.995	2 - 5% HNO ₃ (v/v)	100	100ml
PSR2A2	SrCO ₃ 99.995	2 - 5% HNO ₃ (v/v)	1,000	100ml
PSR2C2	SrCO ₃ 99.995	2 - 5% HNO ₃ (v/v)	1,000	500ml
PSR4A2	SrCO ₃ 99.995	2 - 5% HNO ₃ (v/v)	10,000	100ml
PSR2A3	SrCO ₃ 99.995	2 - 5% HCl (v/v)	1,000	100ml
PSR2C3	SrCO ₃ 99.995	2 - 5% HCl (v/v)	1,000	500ml
PSR4A3	SrCO ₃ 99.995	2 - 5% HCl (v/v)	10,000	100ml
Sulphur				
PS1A7	(NH ₄) ₂ SO ₄ 99.999	H ₂ O	100	100ml
PS2A7	(NH ₄) ₂ SO ₄ 99.999	H ₂ O	1,000	100ml
PS2C7	(NH ₄) ₂ SO ₄ 99.999	H ₂ O	1,000	500ml
PS4A7	(NH ₄) ₂ SO ₄ 99.999	H ₂ O	10,000	100ml
Tantalum				
PTA1A9	Ta 99.98	1% HF + 5% HNO ₃ (v/v)	100	100ml
PTA2A9	Ta 99.98	1% HF + 5% HNO ₃ (v/v)	1,000	100ml
PTA2C9	Ta 99.98	1% HF + 5% HNO ₃ (v/v)	1,000	500ml
PTA4A9	Ta 99.98	1% HF + 5% HNO ₃ (v/v)	10,000	100ml
Tellurium				
PTE1A10	Te 99.999	20% HCl (v/v)	100	100ml
PTE2A10	Te 99.999	20% HCl (v/v)	1,000	100ml
PTE2C10	Te 99.999	20% HCl (v/v)	1,000	500ml
Terbium				
PTB1A2	Tb ₄ O ₇ 99.999	2 - 5% HNO ₃ (v/v)	100	100ml
PTB2A2	Tb ₄ O ₇ 99.999	2 - 5% HNO ₃ (v/v)	1,000	100ml
PTB2C2	Tb ₄ O ₇ 99.999	2 - 5% HNO ₃ (v/v)	1,000	500ml
PTB4A2	Tb ₄ O ₇ 99.999	2 - 5% HNO ₃ (v/v)	10,000	100ml

Product No.	Starting Material and its Purity %	Matrix	Conc $\mu\text{g/ml}$	Pack size
Thallium				
PTL1A2	TINO ₃ 99.9995	2 - 5% HNO ₃ (v/v)	100	100ml
PTL2A2	TINO ₃ 99.9995	2 - 5% HNO ₃ (v/v)	1,000	100ml
PTL2C2	TINO ₃ 99.9995	2 - 5% HNO ₃ (v/v)	1,000	500ml
PTL4A2	TINO ₃ 99.9995	2 - 5% HNO ₃ (v/v)	10,000	100ml
Thorium				
PTH1A2	ThO ₂ 99.95	2 - 5% HNO ₃ (v/v)	100	100ml
PTH2A2	ThO ₂ 99.95	2 - 5% HNO ₃ (v/v)	1,000	100ml
PTH2C2	ThO ₂ 99.95	2 - 5% HNO ₃ (v/v)	1,000	500ml
PTH4A2	ThO ₂ 99.95	2 - 5% HNO ₃ (v/v)	10,000	100ml
Thulium				
PTM1A2	Tm ₂ O ₃ 99.99	2 - 5% HNO ₃ (v/v)	100	100ml
PTM2A2	Tm ₂ O ₃ 99.99	2 - 5% HNO ₃ (v/v)	1,000	100ml
PTM2C2	Tm ₂ O ₃ 99.99	2 - 5% HNO ₃ (v/v)	1,000	500ml
PTM4A2	Tm ₂ O ₃ 99.99	2 - 5% HNO ₃ (v/v)	10,000	100ml
Tin				
PSN1A5	Sn 99.999	1% HF + 5% HNO ₃ (v/v)	100	100ml
PSN2A5	Sn 99.999	1% HF + 5% HNO ₃ (v/v)	1,000	100ml
PSN2C5	Sn 99.999	1% HF + 5% HNO ₃ (v/v)	1,000	500ml
PSN4A5	Sn 99.999	1% HF + 5% HNO ₃ (v/v)	10,000	100ml
PSN2A13	Sn 99.999	10% HCl (v/v)	1,000	100ml
PSN2C13	Sn 99.999	10% HCl (v/v)	1,000	500ml
PSN4A19	Sn 99.999	20% HCl (v/v)	10,000	100ml
Titanium				
PTI1A9	Ti 99.98	1% HF + 5% HNO ₃ (v/v)	100	100ml
PTI2A9	Ti 99.98	1% HF + 5% HNO ₃ (v/v)	1,000	100ml
PTI2C9	Ti 99.98	1% HF + 5% HNO ₃ (v/v)	1,000	500ml
PTI4A9	Ti 99.98	1% HF + 5% HNO ₃ (v/v)	10,000	100ml
Tungsten				
PW2A7	W 99.99+	2% NH ₄ OH (v/v)	1,000	100ml
PW2C7	W 99.99+	2% NH ₄ OH (v/v)	1,000	500ml
PW4A7	W 99.99+	2% NH ₄ OH (v/v)	10,000	100ml
Uranium				
PU1A2	U ₃ O ₈ 99.95	2 - 5% HNO ₃ (v/v)	100	100ml
PU2A2	U ₃ O ₈ 99.95	2 - 5% HNO ₃ (v/v)	1,000	100ml
PU2C2	U ₃ O ₈ 99.95	2 - 5% HNO ₃ (v/v)	1,000	500ml
PU4A2	U ₃ O ₈ 99.95	2 - 5% HNO ₃ (v/v)	10,000	100ml
Vanadium				
PV1A19	NH ₄ VO ₃ 99.95+	2 - 5% HNO ₃ (v/v)	100	100ml
PV2A19	NH ₄ VO ₃ 99.95+	2 - 5% HNO ₃ (v/v)	1,000	100ml
PV2C19	NH ₄ VO ₃ 99.95+	2 - 5% HNO ₃ (v/v)	1,000	500ml
PV4A19	NH ₄ VO ₃ 99.95+	2 - 5% HNO ₃ (v/v)	10,000	100ml
Ytterbium				
PYB2A2	Yb ₂ O ₃ 99.99	2 - 5% HNO ₃ (v/v)	1,000	100ml
PYB2C2	Yb ₂ O ₃ 99.99	2 - 5% HNO ₃ (v/v)	1,000	500ml
PYB4A2	Yb ₂ O ₃ 99.99	2 - 5% HNO ₃ (v/v)	10,000	100ml
Yttrium				
PY1A2	Y ₂ O ₃ 99.999	2 - 5% HNO ₃ (v/v)	100	100ml
PY2A2	Y ₂ O ₃ 99.999	2 - 5% HNO ₃ (v/v)	1,000	100ml
PY2C2	Y ₂ O ₃ 99.999	2 - 5% HNO ₃ (v/v)	1,000	500ml
PY4A2	Y ₂ O ₃ 99.999	2 - 5% HNO ₃ (v/v)	10,000	100ml

Product No.	Starting Material and its Purity %	Matrix	Conc µg/ml	Pack size
Zinc				
PZN1A2	Zn 99.999	2 - 5% HNO ₃ (v/v)	100	100ml
PZN2A2	Zn 99.999	2 - 5% HNO ₃ (v/v)	1,000	100ml
PZN2C2	Zn 99.999	2 - 5% HNO ₃ (v/v)	1,000	500ml
PZN4A2	Zn 99.999	2 - 5% HNO ₃ (v/v)	10,000	100ml
PZN2A3	Zn 99.999	2% HCl (v/v)	1,000	100ml
PZN2C3	Zn 99.999	2% HCl (v/v)	1,000	500ml
PZN4A3	Zn 99.999	2% HCl (v/v)	10,000	100ml
Zirconium				
PZR1A2	Zr 99.98	1% HF + 5% HNO ₃ (v/v)	100	100ml
PZR2A2	Zr 99.98	1% HF + 5% HNO ₃ (v/v)	1,000	100ml
PZR2C2	Zr 99.98	1% HF + 5% HNO ₃ (v/v)	1,000	500ml
PZR4A2	Zr 99.98	1% HF + 5% HNO ₃ (v/v)	10,000	100ml

ICP - MS, ICP Multi-Element Standards

Product No.	Elements	Conc µg/ml	Matrix	Pack size
Multi-Element Tuning Standard, 33 Elements				
REICPTUNE33A	Ag	5	20% HCl, tr. HF	100ml
	As	20		
	Ba	5		
	Be	20		
	Bi	5		
	Cd	20		
	Co	5		
	Cr	5		
	Cu	5		
	Ge	10		
	In	5		
	Ir	5		
	Li	5		
	Lu	5		
	Mg	10		
	Mn	5		
	Mo	10		
	Na	5		
	Ni	10		
	Pb	10		
	Pd	10		
	Ru	10		
	Sb	10		
	Sc	5		
	Sn	10		
	Sr	5		
	Tb	2.5		
	Th	5		
	Tl	5		
	U	5		
	V	5		
	Y	2.5		

Product No.	Elements	Conc $\mu\text{g/ml}$	Matrix	Pack size
Multi-Element Calibration Standard, 29 Elements				
REICPCAL29A	Ag	10	2-5% HNO_3	100ml
	Al	10		
	As	100		
	B	100		
	Ba	10		
	Be	100		
	Bi	10		
	Ca	1000		
	Cd	10		
	Co	10		
	Cr	10		
	Cu	10		
	Fe	100		
	Ga	10		
	K	10		
	Li	10		
	Mg	10		
	Mn	10		
	Mo	10		
	Na	10		
	Ni	10		
	Pb	10		
	Rb	10		
	Se	100		
	Sr	10		
	Te	10		
	Tl	10		
	U	10		
	V	10		

Product No.	Elements	Conc µg/ml	Matrix	Pack size
Multi-Element Calibration Standard, 26 Elements				
REICPCAL26A	Ag	10	2-5% HNO ₃	100ml
	Al	10		
	As	10		
	Ba	10		
	Be	10		
	Ca	10		
	Cd	10		
	Co	10		
	Cr	10		
	Cs	10		
	Cu	10		
	Fe	10		
	Ga	10		
	K	10		
	Li	10		
	Mg	10		
	Mn	10		
	Na	10		
	Ni	10		
	Pb	10		
	Rb	10		
	Se	10		
	Sr	10		
	Tl	10		
	U	10		
	V	10		
Multi-Element Tuning Standard, 25 Elements				
REICPTUNE25A	Ag	10	5% HNO ₃ ,	100ml
	Al	10	tr. HF, tr. Tart. Acid	
	As	10		
	Ba	10		
	Be	10		
	Ca	1000		
	Cd	10		
	Co	10		
	Cr	10		
	Cu	10		
	Fe	1000		
	K	1000		
	Mg	1000		
	Mn	10		
	Mo	10		
	Na	1000		
	Ni	10		
	Pb	10		
	Sb	10		
	Se	10		
	Sr	10		
	Ta	10		
	Th	10		
	U	10		
	V	10		

Product No.	Elements	Conc $\mu\text{g/ml}$	Matrix	Pack size
Multi-Element Verification Standard, 24 Elements according to Test Method 200.8				
REICPVER24A	Ag	10	2-5% HNO_3	100ml
	Al	10		
	As	10		
	Ba	10		
	Be	10		
	Ca	10		
	Cd	10		
	Co	10		
	Cr	10		
	Cu	10		
	Fe	10		
	K	10		
	Mg	10		
	Mn	10		
	Mo	10		
	Na	10		
	Ni	10		
	Pb	10		
	Sb	10		
	Se	10		
	Th	10		
	Tl	10		
	U	10		
	V	10		
Multi-Element Tuning Standard, 23 Elements				
REICPTUNE23A	Al	100	2-5% HNO_3	100ml
	B	100		
	Ba	100		
	Be	100		
	Bi	100		
	Ca	100		
	Cd	100		
	Co	100		
	Cr	100		
	Cu	100		
	Fe	100		
	Ga	100		
	K	100		
	Li	100		
	Mg	100		
	Mn	100		
	Na	100		
	Ni	100		
	Pb	100		
	Se	100		
	Sr	100		
	Te	100		
	Tl	100		

Product No.	Elements	Conc µg/ml	Matrix	Pack size
ICP Multi-Element Standard, 23 Elements				
ICP23A20	As	100	5% HNO ₃ , 0.2% HF	100ml
	Be	100		
	Ca	100		
	Cd	100		
	Co	100		
	Cr	100		
	Cu	100		
	Fe	100		
	Li	100		
	Mg	100		
	Mn	100		
	Mo	100		
	Ni	100		
	P	100		
	Pb	100		
	Sb	100		
	Se	100		
	Sn	100		
	Sr	100		
	Ti	100		
	TL	100		
	V	100		
	Zn	100		
Multi-Element Tuning Standard, 22 Elements				
REICPTUNE22A	As	50	2-5% HNO ₃	100ml
	B	100		
	Ba	50		
	Be	20		
	Bi	10		
	Ca	35000		
	Cd	20		
	Co	25		
	Cr	20		
	Cu	20		
	Fe	100		
	K	3000		
	Mg	15000		
	Mn	30		
	Mo	100		
	Na	8000		
	Ni	50		
	Pb	25		
	Se	10		
	Sr	100		
	Tl	10		
	V	50		

Product No.	Elements	Conc µg/ml	Matrix	Pack size
Multi-Element Tuning Standard, 22 Elements				
REICPTUNE22B	Ag	1000	2-5% HNO ₃	100ml
	Al	1000		
	B	1000		
	Ba	1000		
	Bi	1000		
	Ca	1000		
	Cd	1000		
	Co	1000		
	Cr	1000		
	Cu	1000		
	Fe	1000		
	Ga	1000		
	In	1000		
	K	1000		
	Li	1000		
	Mg	1000		
	Mn	1000		
	Na	1000		
	Ni	1000		
	Pb	1000		
	Sr	1000		
	Ti	1000		
Multi-Element Calibration Standard, 21 Elements according to Test Method 200.7				
REICPCAL21A	Ag	50	5% HNO ₃	100ml
	As	500		
	B	200		
	Ba	200		
	Be	200		
	Ca	1000		
	Cd	200		
	Ce	200		
	Co	200		
	Cr	200		
	Cu	200		
	K	1000		
	Mg	1000		
	Mn	200		
	Ni	200		
	P	1000		
	Pb	200		
	Se	500		
	Sr	200		
	Tl	500		
	V	200		

Product No.	Elements	Conc $\mu\text{g/ml}$	Matrix	Pack size
Multi-Element Verification Standard, 21 Elements according to Test Method 200.7				
REICPVER21A	Ag	100	5% HNO_3	100ml
	As	100		
	B	100		
	Ba	100		
	Be	100		
	Ca	100		
	Cd	100		
	Ce	100		
	Co	100		
	Cr	100		
	Cu	100		
	Hg	100		
	Mg	100		
	Mn	100		
	Ni	100		
	P	100		
	Pb	100		
	Se	100		
	Sr	100		
	Tl	100		
	V	100		
Multi-Element Verification Standard, 21 Elements according to Test Method 200.7				
REICPVER21B	Ag	20	5% HNO_3	100ml
	As	100		
	B	100		
	Ba	100		
	Be	100		
	Ca	100		
	Cd	100		
	Ce	100		
	Co	100		
	Cr	100		
	Cu	100		
	K	500		
	Mg	100		
	Mn	100		
	Ni	100		
	P	500		
	Pb	100		
	Se	100		
	Sr	100		
	Tl	100		
	V	100		

Product No.	Elements	Conc µg/ml	Matrix	Pack size
Multi-Element Calibration Standard, 20 Elements according to Test Method 6020				
REICPCAL20A	Ag	10	2% HNO ₃ , tr.	100ml
	As	10	Tart. Acid	
	Ba	10		
	Be	10		
	Ca	10		
	Cd	10		
	Co	10		
	Cr	10		
	Cu	10		
	Fe	10		
	K	10		
	Mg	10		
	Mn	10		
	Na	10		
	Ni	10		
	Pb	10		
	Sb	10		
	Se	10		
	Tl	10		
	V	10		
Multi-Element Verification Standard, 20 Elements				
REICPVER20A	As	100	5% HNO ₃ , tr. HF, tr. Tart. Acid	100ml
	Be	100		
	Ca	100		
	Cd	100		
	Co	100		
	Cr	100		
	Cu	100		
	Fe	100		
	Li	100		
	Mg	100		
	Mn	100		
	Mo	100		
	Ni	100		
	Pb	100		
	Sb	100		
	Se	100		
	Sr	100		
	Ti	100		
	Tl	100		
	V	100		

Product No.	Elements	Conc $\mu\text{g/ml}$	Matrix	Pack size
Multi-Element Calibration Standard, 19 Elements				
REICPCAL19A	Ag	10	5% HNO_3 , tr. HF,	100ml
	Al	10	tr. Tart. Acid	
	As	10		
	Ba	10		
	Be	10		
	Cd	10		
	Co	10		
	Cu	10		
	Fe	1000		
	Mg	1000		
	Mn	10		
	Na	1000		
	Pb	10		
	Sb	10		
	Sr	10		
	Th	10		
	Tl	10		
	U	10		
	V	10		
ICP Multi-Element Standard, 19 Elements				
ICP-HR-195	AL	100	2-5% HNO_3	500ml
	As	100		
	Ba	100		
	Bi	100		
	Ca	100		
	Cd	100		
	Co	100		
	Cr	100		
	Cu	100		
	Mg	100		
	Mn	100		
	Mo	100		
	K	100		
	Pb	100		
	Ni	100		
	Se	100		
	Ti	100		
	V	100		
	Zn	100		

Product No.	Elements	Conc $\mu\text{g/ml}$	Matrix	Pack size
ICP Multi-Element Standard, 19 Elements				
ICP19A10	AL	100	2% HNO_3	100ml
	Ba	5		
	Be	1		
	Bi	200		
	B	15		
	Cd	20		
	Cr	25		
	Co	20		
	Cu	30		
	Ga	150		
	In	200		
	Fe	15		
	Pb	200		
	Mn	5		
	Ni	50		
	Ag	50		
	Sr	1		
	Tl	40		
	Zn	20		
ICP Multi-Element Standard, 18 Elements				
ICP-JM-ME4A	AL	8	5% HCl	500ml
	Ca	4		
	Ce	4		
	Co	4		
	Cr	4		
	Cu	4		
	Fe	4		
	Ni	4		
	P	4		
	S	4		
	Zn	4		
	K	4		
	La	4		
	Si	4		
	Mg	1.6		
	Mn	1.6		
	Na	1.6		
	Pd	1.6		

Product No.	Elements	Conc $\mu\text{g/ml}$	Matrix	Pack size
ICP Multi-Element Standard, 18 Elements				
ICP-JM-ME10A	Al	20	5% HCl	500ml
	Ca	10		
	Ce	10		
	Co	10		
	Cr	10		
	Cu	10		
	Fe	10		
	Ni	10		
	P	10		
	S	10		
	Zn	10		
	K	10		
	La	10		
	Si	10		
	Mg	4		
	Mn	4		
	Na	4		
	Pd	4		
Multi-Element Verification Standard, 18 Elements				
REICPVER18A	As	100	5% HNO_3 , tr. HF, tr. Tart. Acid	100ml
	Be	100		
	Ca	100		
	Cd	100		
	Co	100		
	Cr	100		
	Cu	100		
	Fe	100		
	Mg	100		
	Mn	100		
	Mo	100		
	Ni	100		
	Pb	100		
	Sb	100		
	Se	100		
	Th	100		
	Tl	100		
	V	100		

Product No.	Elements	Conc µg/ml	Matrix	Pack size
Multi-Element Verification Standard, 17 Elements according to Test Method 6010				
REICPVER17A	Ag	10	5% HNO ₃ , tr. HF,	100ml
	Al	200	tr. Tart. Acid	
	As	15		
	Ba	200		
	Be	5		
	Cd	5		
	Co	50		
	Cr	10		
	Cu	25		
	Fe	100		
	Mn	15		
	Ni	40		
	Pb	10		
	Sb	60		
	Se	35		
	Tl	25		
	V	50		
Multi-Element Spiking Standard, 17 Elements				
REICPSPIK17A	Ag	25	5% HNO ₃ , tr. HF,	100ml
	Al	2000	tr. Tart. Acid	
	As	1000		
	Ba	1000		
	Be	25		
	Cd	25		
	Co	100		
	Cr	200		
	Fe	2000		
	Mn	200		
	Mo	200		
	Ni	200		
	Pb	200		
	Sb	200		
	Se	1000		
	Tl	200		
	V	200		
Multi-Element Calibration Standard, 17 Elements according to Test Method 200.8				
REICPCAL17A	Al	10	5% HNO ₃ ,	100ml
	As	10	tr. Tart. Acid	
	Be	10		
	Cd	10		
	Co	10		
	Cr	10		
	Cu	10		
	Mn	10		
	Mo	10		
	Ni	10		
	Pb	10		
	Sb	10		
	Se	10		
	Th	10		
	Tl	10		
	U	10		
	V	10		

Product No.	Elements	Conc µg/ml	Matrix	Pack size
Multi-Element Calibration Standard, 17 Elements according to Test Method 200.8				
REICPCAL17B	Al	10	5% HNO ₃ ,	100ml
	As	10	tr. Tart. Acid	
	Be	10		
	Cd	10		
	Co	10		
	Cr	10		
	Cu	10		
	Mn	10		
	Mo	10		
	Ni	10		
	Pb	10		
	Sb	10		
	Se	50		
	Th	10		
	Tl	10		
	U	10		
	V	10		
Multi-Element Calibration Standard, 17 Elements				
REICPCAL17C	Ce	10	2-5% HNO ₃	100ml
	Dy	10		
	Er	10		
	Eu	10		
	Gd	10		
	Ho	10		
	La	10		
	Lu	10		
	Nd	10		
	Pr	10		
	Sc	10		
	Sm	10		
	Tb	10		
	Th	10		
	Tm	10		
	U	10		
	Y	10		

Product No.	Elements	Conc µg/ml	Matrix	Pack size
Multi-Element Calibration Standard, 17 Elements				
REICPCAL17D	Ag	100	2-5% HNO ₃	100ml
	Al	100		
	As	100		
	Ba	100		
	Be	100		
	Cd	100		
	Co	100		
	Cr	100		
	Cu	100		
	Mn	100		
	Ni	100		
	Pb	100		
	Se	100		
	Th	100		
	Tl	100		
	U	100		
	V	100		
Multi-Element Calibration Standard, 17 Elements according to Test Method 200.8				
REICPCAL17E	Ag	20	2-5% HNO ₃	100ml
	Al	20		
	As	20		
	Ba	20		
	Be	20		
	Cd	20		
	Co	20		
	Cr	20		
	Cu	20		
	Mn	20		
	Ni	20		
	Pb	20		
	Se	20		
	Th	20		
	Tl	20		
	U	20		
	V	20		
Multi-Element Calibration Standard, 17 Elements according to Test Method 200.8				
REICPCAL17F	Al	10	5% HNO ₃ ,	100ml
	As	10	tr. Tart. Acid	
	Be	10		
	Cd	10		
	Co	10		
	Cr	10		
	Mg	10		
	Mn	10		
	Mo	10		
	Ni	10		
	Pb	10		
	Sb	10		
	Se	10		
	Th	10		
	Tl	10		
	U	10		
	V	10		

Product No.	Elements	Conc µg/ml	Matrix	Pack size
Multi-Element Verification Standard, 16 Elements				
REICPVER16A	Ag	10	5% HNO ₃ ,	100ml
	Al	300	tr. Tart. Acid	
	As	10		
	Ba	100		
	Be	10		
	Cd	10		
	Co	5		
	Cr	20		
	Cu	20		
	Mn	5		
	Ni	10		
	Pb	10		
	Sb	20		
	Se	50		
	Ta	10		
	V	10		
Multi-Element Interference Standard, 16 Elements according to Test Method 05.2				
REICPINTF16A	Ag	10	5% HNO ₃ ,	100ml
	Al	10	tr. Tart. Acid	
	As	10		
	Ba	10		
	Be	10		
	Cd	10		
	Co	10		
	Cr	10		
	Cu	10		
	Mn	10		
	Ni	10		
	Pb	10		
	Sb	10		
	Se	10		
	Tl	10		
	V	10		
Multi-Element Interference Standard, 16 Elements according to Test Method 200.7				
REICPINTF16B	Ag	300	5% HNO ₃	100ml
	As	1000		
	Ba	300		
	Be	100		
	Ca	300		
	Co	300		
	Cr	300		
	Cu	300		
	Hg	50		
	K	20000		
	Mn	200		
	Ni	300		
	Pb	1000		
	Se	500		
	Tl	1000		
	V	1000		

Product No.	Elements	Conc $\mu\text{g/ml}$	Matrix	Pack size
Multi-Element Calibration Standard, 16 Elements				
REICPCAL16A	Ag	10	2-5% HNO_3	100ml
	Al	10		
	Ca	10		
	Co	10		
	Cr	10		
	Cs	10		
	Cu	10		
	Fe	10		
	K	10		
	Li	10		
	Mg	10		
	Mn	10		
	Na	10		
	Ni	10		
	Rb	10		
	Sr	10		
Multi-Element Calibration Standard, 16 Elements				
REICPCAL16B	Al	100	2-5% HNO_3	100ml
	As	100		
	Ba	100		
	Be	100		
	Bi	100		
	Ca	100		
	Cs	100		
	Ga	100		
	In	100		
	K	100		
	Li	100		
	Mg	100		
	Na	100		
	Rb	100		
	Se	100		
	Sr	100		
Multi-Element Calibration Standard, 16 Elements				
REICPCAL16C	Ce	100	2-5% HNO_3	100ml
	Dy	100		
	Er	100		
	Gd	100		
	Ho	100		
	La	100		
	Lu	100		
	Nd	100		
	Pr	100		
	Sc	100		
	Sm	100		
	Tb	100		
	Th	100		
	Tm	100		
	U	100		
	Y	100		

Product No.	Elements	Conc µg/ml	Matrix	Pack size
Multi-Element Calibration Standard, 16 Elements				
REICPCAL16D	Ce	10	2-5% HNO ₃	100ml
	Dy	10		
	Er	10		
	Eu	10		
	Gd	10		
	Ho	10		
	La	10		
	Lu	10		
	Nd	10		
	Pr	10		
	Sc	10		
	Sm	10		
	Tb	10		
	Th	10		
	Tm	10		
	Y	10		
Multi-Element Verification Standard, 16 Elements				
REICPVER16B	Ag	10	HNO ₃ tr. HF	100ml
	Al	10		
	As	10		
	Ba	10		
	Be	10		
	Cd	10		
	Co	10		
	Cr	10		
	Cu	10		
	Mn	10		
	Ni	10		
	Pb	10		
	Sb	10		
	Se	10		
	Tl	10		
	V	10		
Multi-Element Calibration Standard, 15 Elements according to Test Method 200.8				
REICPCAL15B	Al	10	5% HNO ₃ , tr. Tart. Acid	100ml
	As	10		
	Be	10		
	Cd	10		
	Co	10		
	Mn	10		
	Mo	10		
	Ni	10		
	Pb	10		
	Sb	10		
	Se	10		
	Th	10		
	Tl	10		
	U	10		
	V	10		

Product No.	Elements	Conc µg/ml	Matrix	Pack size
Multi-Element Interference Standard, 15 Elements according to Test Method 6010				
REICPINTF15A	Ag	20	5% HNO ₃ ,	100ml
	As	10	tr. Tart. Acid	
	Ba	50		
	Be	50		
	Cd	100		
	Co	50		
	Cr	50		
	Cu	50		
	Mn	50		
	Ni	100		
	Pb	5		
	Sb	60		
	Se	5		
	Tl	10		
	V	50		
Multi-Element Tuning Standard, 15 Elements				
REICPTUNE15A	B	10	HNO ₃ tr. HCl	100ml
	Ba	10		
	Co	10		
	Fe	10		
	Ga	10		
	In	10		
	K	10		
	Li	10		
	Lu	10		
	Na	10		
	Rh	10		
	Sc	10		
	Th	10		
	U	10		
	Y	10		
Multi-Element Calibration Standard, 15 Elements				
REICPCAL15A	Ag	250	2-5% HNO ₃	100ml
	Al	2000		
	Ba	2000		
	Be	50		
	Ca	5000		
	Co	500		
	Cr	200		
	Cu	250		
	Fe	1000		
	K	5000		
	Mg	5000		
	Mn	500		
	Na	5000		
	Ni	500		
	V	500		

Product No.	Elements	Conc $\mu\text{g/ml}$	Matrix	Pack size
Multi-Element Interference Standard, 15 Elements according to Test Method 200.7				
REICPINTF15B	Ag	300	2-5% HNO_3	100ml
	As	1000		
	Ba	300		
	Be	100		
	Cd	300		
	Co	300		
	Cr	300		
	Cu	300		
	K	20000		
	Mn	200		
	Ni	300		
	Pb	1000		
	Se	500		
	Tl	1000		
	V	300		
ICP Multi-Element Standard, 15 Elements				
ICP15A10	Al	100	2-5% HNO_3	100ml
	Ba	100		
	Ca	100		
	Cd	100		
	Co	100		
	Cr	100		
	Cu	100		
	Fe	100		
	Mg	100		
	Mn	100		
	Na	100		
	Ni	100		
	Pb	100		
	Ti	100		
	Zn	100		
Multi-Element Verification Standard, 14 Elements				
REICPVER14A	Ag	20	5% HNO_3 ,	100ml
	As	20	tr. Tart. Acid	
	Be	10		
	Cd	10		
	Co	100		
	Cr	20		
	Cu	50		
	Mn	30		
	Ni	80		
	Pb	6		
	Sb	120		
	Se	10		
	Tl	20		
	V	100		

Product No.	Elements	Conc µg/ml	Matrix	Pack size
Multi-Element Calibration Standard, 14 Elements				
REICPCAL14A	Al	500	5% HNO ₃	100ml
	As	100		
	Be	100		
	Cd	25		
	Co	100		
	Cr	100		
	Cu	100		
	Fe	100		
	Hg	100		
	Mn	100		
	Ni	100		
	Pb	100		
	Se	25		
	V	250		
Multi-Element Calibration Standard, 14 Elements				
REICPCAL14B	B	100	HNO ₃ , tr. HF	100ml
	Ge	100		
	Hf	100		
	Mo	100		
	Nb	100		
	P	100		
	Re	100		
	S	100		
	Sb	100		
	Si	100		
	Sn	100		
	Ta	100		
	Ti	100		
	W	100		
Multi-Element Calibration Standard, 14 Elements				
REICPCAL14C	Al	5	HNO ₃ , tr. HF	100ml
	As	5		
	Ba	5		
	Cd	5		
	Co	5		
	Cr	5		
	Cu	5		
	K	50		
	Mn	5		
	Mo	5		
	Ni	5		
	Pb	5		
	Se	5		
	Sr	5		

Product No.	Elements	Conc $\mu\text{g/ml}$	Matrix	Pack size
Multi-Element Calibration Standard, 14 Elements				
REICPCAL14D	Al	50	2-5% HNO_3	100ml
	As	50		
	Ba	50		
	Cd	50		
	Co	50		
	Cr	50		
	Cu	50		
	K	500		
	Mn	50		
	Mo	50		
	Ni	50		
	Pb	50		
	Se	50		
	Sr	50		
Multi-Element Calibration Standard, 13 Elements				
REICPCAL13A	As	10	2-5% HNO_3	100ml
	B	10		
	Ba	10		
	Be	10		
	Bi	10		
	Cd	10		
	Ga	10		
	In	10		
	Pb	10		
	Sb	10		
	Se	10		
	Tl	10		
	V	10		
Multi-Element Calibration Standard, 13 Elements				
REICPCAL13B	Al	500	2-5% HNO_3	100ml
	As	100		
	Be	100		
	Cd	25		
	Co	100		
	Cr	100		
	Cu	100		
	Fe	100		
	Mn	100		
	Ni	100		
	Pb	100		
	Se	25		
	V	250		

Product No.	Elements	Conc µg/ml	Matrix	Pack size
Multi-Element Calibration Standard, 12 Elements				
REICPCAL12A	Ag	100	2-5% HNO ₃	100ml
	Cd	100		
	Co	100		
	Cr	100		
	Cu	100		
	Fe	100		
	Hg	100		
	Mn	100		
	Ni	100		
	Pb	100		
	Tl	100		
	V	100		
Multi-Element Tuning Standard, 12 Elements				
REICPTUNE12A	Ba	10	2-5% HNO ₃	100ml
	Be	10		
	Ce	10		
	Co	10		
	In	10		
	Li	10		
	Mg	10		
	Pb	10		
	Rh	10		
	Tl	10		
	U	10		
	Y	10		
Tuning Solution 3, 12 Elements				
REICPTUNE3	Ba	10	5% HNO ₃	100ml
	Be	10		
	Ce	10		
	Co	10		
	In	10		
	Li	10		
	Mg	10		
	Pb	10		
	Rh	10		
	Tl	10		
	U	10		
	Y	10		

Product No.	Elements	Conc µg/ml	Matrix	Pack size
Multi-Element Tuning Standard, 11 Elements				
REICPTUNE11A	Ba	10	5% HNO ₃	100ml
	Be	10		
	Ce	10		
	Co	10		
	In	10		
	Li	10		
	Mg	10		
	Pb	10		
	Tb	10		
	U	10		
	Y	10		
Multi-Element Verification Standard, 11 Elements				
REICPVER11A	Ag	100	5% HNO ₃	100ml
	Ba	500		
	Be	200		
	Cd	250		
	Co	500		
	Cu	500		
	Fe	500		
	Mn	500		
	Ni	500		
	Pb	500		
	Tl	500		
Multi-Element Verification Standard, 11 Elements according to Test Method 6020				
REICPVER11B	Ag	20	5% HNO ₃	100ml
	Ba	100		
	Be	40		
	Cd	50		
	Co	100		
	Cu	100		
	Fe	100		
	Mn	100		
	Ni	100		
	Pb	100		
	Tl	100		
Multi-Element Interference Standard, 11 Elements				
REICPINTF11A	Ag	100	2-5% HNO ₃	100ml
	Ba	50		
	Be	50		
	Cd	100		
	Co	50		
	Cr	50		
	Cu	50		
	Mn	50		
	Ni	100		
	Pb	100		
	V	50		

Product No.	Elements	Conc $\mu\text{g/ml}$	Matrix	Pack size
Multi-Element Calibration Standard, 10 Elements				
REICPCAL10A	Be	100	5% HNO_3	100ml
	Co	20		
	In	10		
	Li	50		
	Mg	25		
	Sc	25		
	Tb	5		
	Tl	10		
	U	5		
	Y	10		
Multi-Element Interference Standard, 10 Elements according to Test Method 6020				
REICPINTF10A	Ag	5	2% HNO_3	100ml
	As	10		
	Cd	10		
	Co	20		
	Cr	20		
	Cu	20		
	Mn	20		
	Ni	20		
	Se	10		
	V	20		
Multi-Element Spiking Standard, 10 Elements				
REICPSPIK10A	Ag	5	5% HNO_3	100ml
	Be	5		
	Cd	5		
	Co	50		
	Cu	25		
	Fe	100		
	Mn	50		
	Ni	50		
	Pb	50		
	Ti	200		
Multi-Element Verification Standard, 10 Elements				
REICPVER10A	Ag	500	20% HCl	100ml
	As	500		
	Ca	5000		
	Cr	500		
	K	5000		
	Mg	5000		
	Na	5000		
	Sb	500		
	Se	500		
	V	500		

Product No.	Elements	Conc $\mu\text{g/ml}$	Matrix	Pack size
Multi-Element Verification Standard, 10 Elements according to Test Method 6010				
REICPVER10B	Ag	100	20% HCl	100ml
	As	100		
	Ca	1000		
	Cr	100		
	Mg	1000		
	Na	1000		
	P	1000		
	Sb	100		
	Se	100		
	V	100		
Multi-Element Calibration Standard, 10 Elements according to Test Method 6010				
REICPCAL10B	Ag	200	5% HNO_3	100ml
	Ba	1000		
	Be	400		
	Cd	500		
	Co	1000		
	Fe	1000		
	Mn	1000		
	Ni	1000		
	Pb	1000		
	Tl	1000		
Multi-Element Calibration Standard, 10 Elements according to Test Method 6010				
REICPCAL10C	Al	1000	20% HCl	100ml
	As	1000		
	Ca	10000		
	Cr	1000		
	K	10000		
	Mg	10000		
	Na	10000		
	Sb	1000		
	Se	1000		
	V	1000		
Multi-Element Calibration Standard, 10 Elements				
REICPCAL10D	Al	20	2% HNO_3 , tr. Tart. Acid	100ml
	Be	5		
	Co	10		
	Cu	10		
	Fe	20		
	Mn	10		
	Ni	10		
	Sb	5		
	Tl	5		
	V	20		
Multi-Element Calibration Standard, 10 Elements				
REICPCAL10E	Au	10	HCl, tr. HNO_3	100ml
	Hf	10		
	Ir	10		
	Pd	10		
	Pt	10		
	Rh	10		
	Ru	10		
	Sb	10		
	Sn	10		
	Tb	10		

Product No.	Elements	Conc µg/ml	Matrix	Pack size
Multi-Element Calibration Standard, 10 Elements				
REICPCAL10F	As	20	HCl, tr. HNO ₃	100ml
	K	100		
	La	20		
	Li	20		
	Mn	20		
	Mo	20		
	Na	20		
	Ni	20		
	P	100		
	S	100		
	Sc	20		
Multi-Element Tuning Standard, 10 Elements				
REICPTUNE10A	Ba	10	2-5% HNO ₃	100ml
	Be	10		
	Bi	10		
	Ce	10		
	Co	10		
	In	10		
	Li	10		
	Ni	10		
	Pb	10		
	U	10		
Multi-Element Calibration Standard, 10 Elements according to Test Method 200.7				
REICPCAL10G	Ag	50	2-5% HNO ₃	100ml
	As	1000		
	B	100		
	Ba	100		
	Ca	1000		
	Cd	200		
	Cu	200		
	Mn	200		
	Se	500		
	Sr	100		
USP 232/233 Compliance 1, 10 Elements				
REICPUSP1	As	15	7% HNO ₃	100ml
	Cd	5		
	Cr	250		
	Cu	2500		
	Hg	15		
	Mn	2500		
	Mo	250		
	Ni	250		
	Pb	10		
	V	250		
Tuning Solution 5, 10 Elements				
REICPTUNE5	Ba	10	5% HNO ₃	100ml
	Be	10		
	Bi	10		
	Ce	10		
	Co	10		
	In	10		
	Li	10		
	Ni	10		
	Pb	10		
	U	10		

Product No.	Elements	Conc µg/ml	Matrix	Pack size
Multi-Element Interference Standard, 9 Elements according to Test Method 6020				
REICPINTF9A	Ag	10	5% HNO ₃ ,	100ml
	Al	10	tr. Tart. Acid	
	As	10		
	Co	10		
	Cr	10		
	Mn	10		
	Ni	10		
	Se	10		
	V	10		
Multi-Element Calibration Standard, 9 Elements				
REICPCAL10H	Be	10	2-5% HNO ₃	100ml
	Bi	10		
	Ce	10		
	Co	10		
	In	10		
	Mg	10		
	Ni	10		
	Pb	10		
	U	10		
Multi-Element Tuning Standard, 9 Elements				
REICPTUNE9A	Fe	10	HCl, tr. HNO ₃	100ml
	K	10		
	La	10		
	Mg	5		
	Mn	5		
	P	10		
	S	50		
	Sc	10		
	Ti	10		
Multi-Element Tuning Standard, 9 Elements				
REICPTUNE9B	Ba	10	2-5% HNO ₃	100ml
	Be	10		
	Ce	10		
	Co	10		
	In	10		
	Mg	10		
	Pb	10		
	Th	10		
	Tl	10		
ICP Multi-Element Standard, 9 Elements				
ICP-WY-95	K	1000	2% HNO ₃	500ml
	Ca	500		
	P	400		
	Na	240		
	Mg	100		
	Fe	10		
	Zn	6		
	Cu	1		
	Mn	1		

Product No.	Elements	Conc $\mu\text{g/ml}$	Matrix	Pack size
Tuning Solution 4, 9 Elements				
REICPTUNE4	Ba	10	2% HNO_3	100ml
	Be	10		
	Ce	10		
	Co	10		
	In	10		
	Mg	10		
	Pb	10		
	Rh	10		
	U	10		
Internal Standard Mix 1, 8 Elements				
REICPIS1	Bi	100	10% HNO_3	100ml
	Ge	100		
	In	100		
	Li	100		
	Lu	100		
	Rh	100		
	Sc	100		
	Tb	100		
Internal Standard Mix 3, 8 Elements				
REICPIS3	Bi	100	7% HNO_3	100ml
	Ho	100		
	In	100		
	Li	100		
	Rh	100		
	Sc	100		
	Tb	100		
	Y	100		
ICP Multi-Element Standard, 8 Elements				
ICP-TG-85	Ca	50	0.1% HNO_3	500ml
	K	13		
	Mg	10		
	Na	10		
	Cu	0.6		
	Zn	0.6		
	Mn	0.6		
	Fe	0.6		
Multi-Element Interference Standard, 8 Elements according to Test Method 6010				
REICPINTF8A	Be	50	5% HNO_3	100ml
	Cd	100		
	Co	50		
	Cu	50		
	Mn	50		
	Ni	100		
	Pb	100		
	S	100		
Multi-Element Spiking Standard, 8 Elements				
REICPSPIK8B	B	1000	5% HNO_3 , tr. HF	100ml
	Ca	10000		
	K	10000		
	Li	1000		
	Mg	10000		
	Na	10000		
	P	1000		
	Sr	1000		

Product No.	Elements	Conc $\mu\text{g/ml}$	Matrix	Pack size
Multi-Element Calibration Standard, 8 Elements				
REICPCAL8A	Ge	10	HCl tr. HNO_3	100ml
	Hf	10		
	Mo	10		
	Nb	10		
	Sn	10		
	Ta	10		
	Ti	10		
	W	10		
Multi-Element Calibration Standard, 8 Elements				
REICPCAL8B	Au	10	10% HCl	100ml
	Ir	10		
	Pd	10		
	Pt	10		
	Re	10		
	Rh	10		
	Ru	10		
	Te	10		
Multi-Element Calibration Standard, 8 Elements				
REICPCAL8C	Ag	200	2-5% HNO_3	100ml
	Be	100		
	Co	1000		
	Cr	200		
	Cu	500		
	Mn	300		
	Ni	800		
	V	1000		
Multi-Element Internal Standard, 7 Elements				
REICPIS7A	Bi	100	5% HNO_3	100ml
	Ga	100		
	In	100		
	Li	100		
	Sc	100		
	Tb	100		
	Y	100		
Multi-Element Internal Standard, 7 Elements				
REICPIS7B	Bi	20	5% HNO_3	100ml
	Ga	20		
	In	20		
	Li	100		
	Sc	100		
	Tb	20		
	Y	20		
Multi-Element Internal Standard, 7 Elements				
REICPIS7C	Bi	100	5% HNO_3	100ml
	Ge	100		
	In	100		
	Li	100		
	Lu	100		
	Sc	100		
	Tb	100		

Product No.	Elements	Conc µg/ml	Matrix	Pack size
Multi-Element Spiking Standard, 7 Elements				
REICPSPIK7A	Al	200	20% HCl	100ml
	As	200		
	Ba	200		
	Cr	20		
	Sb	50		
	Se	200		
	V	50		
Multi-Element Internal Standard, 7 Elements according to Test Method 200.8				
REICPIS7D	Bi	10	5% HNO ₃	100ml
	In	10		
	Li	10		
	Lu	10		
	Sc	10		
	Te	10		
	Y	10		
Multi-Element Internal Standard, 7 Elements according to Test Method 6020				
REICPIS7E	Bi	10	2% HNO ₃	100ml
	Ho	10		
	In	10		
	Li	10		
	Sc	10		
	Tb	10		
	Y	10		
Multi-Element Verification Standard, 7 Elements				
REICPVER7A	Ag	100	5% HNO ₃ , tr. HF	100ml
	Al	100		
	B	100		
	Ba	100		
	K	1000		
	Na	100		
	Si	50		
Multi-Element Verification Standard, 7 Elements				
REICPVER7B	Ag	50	5% HNO ₃ , tr. HF	100ml
	Al	100		
	B	100		
	Ba	100		
	K	1000		
	Na	100		
	Si	500		
Multi-Element Calibration Standard, 7 Elements according to Test Methods 200.8 & 05.2				
REICPCAL7A	Ag	25	2% HNO ₃	100ml
	As	25		
	Ba	500		
	Cd	5		
	Cr	25		
	Pb	25		
	Se	5		

Product No.	Elements	Conc $\mu\text{g/ml}$	Matrix	Pack size
Multi-Element Calibration Standard, 7 Elements				
REICPCAL7B	Cr	10	2-5% HNO_3	100ml
	Hf	100		
	Ir	100		
	Sb	100		
	Sn	100		
	Ta	100		
	Ti	100		
Multi-Element Calibration Standard, 7 Elements				
REICPCAL7C	As	100	2-5% HNO_3	100ml
	Be	100		
	Cd	100		
	Ni	100		
	Pb	100		
	Se	100		
	Tl	100		
ICP Multi-Element Standard, 7 Elements				
ICP7A20	Ag	50	5% HNO_3 ,	100ml
	AL	100	0.2% HF	
	B	100		
	Ba	100		
	Na	100		
	K	1000		
	Si	500		
Multi-Element Tuning Standard, 6 Elements				
REICPTUNE6A	Ba	10	1% HNO_3	100ml
	Ce	10		
	Co	10		
	In	10		
	Mg	10		
	Pb	10		
Multi-Element Calibration Standard, 6 Elements				
REICPCAL6A	Al	200	5% HNO_3	100ml
	Ca	1000		
	Cr	20		
	K	400		
	Na	200		
	Ni	20		
Multi-Element Calibration Standard, 6 Elements				
REICPCAL6B	Ba	500	2% HNO_3	100ml
	Ca	500		
	K	100		
	Mg	100		
	Mo	500		
	Na	500		
Multi-Element Calibration Standard, 6 Elements				
REICPCAL6C	Au	100	10% HCl	100ml
	Ir	100		
	Pd	100		
	Pt	100		
	Rh	100		
	Ru	100		

Product No.	Elements	Conc $\mu\text{g/ml}$	Matrix	Pack size
Multi-Element Calibration Standard, 6 Elements				
REICPCAL6D	Ir	100	15% HCl	100ml
	Os	100		
	Pd	100		
	Pt	100		
	Rh	100		
	Ru	100		
Multi-Element Calibration Standard, 6 Elements according to Test Method 200.7				
REICPCAL6E	Be	100	2-5% HNO_3	100ml
	Fe	1000		
	Mg	1000		
	Ni	200		
	Pb	1000		
	Tl	500		
USP 232/233 Compliance 2, 6 Elements				
REICPUSP2	Ir	100	15% HCl	100ml
	Os	100		
	Pd	100		
	Pt	100		
	Rh	100		
	Ru	100		
Internal Standard Mix 2, 6 Elements				
REICPIS2	Bi	100	3% HNO_3	100ml
	In	100		
	Li	100		
	Sc	100		
	Tb	100		
	Y	100		
ICP Multi-Element Standard, 5 Elements				
STD-GLO-5-500	Al	1000	6% HNO_3	500ml
	Ca	1000		
	K	1000		
	Mg	1000		
	Na	1000		
ICP Multi-Element Standard, 5 Elements				
ICP-VL-51	Mg	1500	2% HNO_3	100ml
	Fe	100		
	K	25		
	S	25		
	Mn	5		
Tuning Solution 6, 5 Elements				
REICPTUNE6	Ca	10	5% HNO_3	100ml
	Fe	10		
	K	10		
	Li	10		
	Na	10		

Product No.	Elements	Conc µg/ml	Matrix	Pack size
Multi-Element Calibration Standard, 5 Elements according to Test Method 6020				
REICPCAL5A	Ca	2000	5% HNO ₃	100ml
	Fe	2000		
	K	2000		
	Mg	2000		
	Na	2000		
Multi-Element Interference Standard, 5 Elements according to Test Method 200.7				
REICPINTF5A	Al	1200	5% HNO ₃	100ml
	Ca	6000		
	Fe	5000		
	Mg	3000		
	Na	1000		
Multi-Element Calibration Standard, 5 Elements according to Test Method 200.7				
REICPCAL5D	Be	50	2% HNO ₃ , tr. HF	100ml
	Cd	150		
	Mn	100		
	Pb	500		
	Se	200		
Multi-Element Calibration Standard, 5 Elements according to Test Method 200.7				
REICPCAL5E	Ba	100	5% HNO ₃	100ml
	Co	100		
	Cu	100		
	Fe	10000		
	V	100		
Multi-Element Calibration Standard, 5 Elements according to Test Method 200.7				
REICPCAL5F	Ag	50	5% HNO ₃ ,	100ml
	B	100	tr. Tart. Acid	
	Mg	1000		
	Sb	200		
	Tl	200		
Multi-Element Tuning Standard, 5 Elements according to Test Methods 200.8 & 05.2				
REICPTUNE5C	Be	10	5% HNO ₃ ,	100ml
	Co	10	tr. Tart. Acid	
	In	10		
	Mg	10		
	Pb	10		
Multi-Element Calibration Standard, 5 Elements				
REICPCAL5H	Ca	1000	2-5% HNO ₃	100ml
	Fe	1000		
	K	1000		
	Mg	1000		
	Na	1000		

Product No.	Elements	Conc µg/ml	Matrix	Pack size
Multi-Element Calibration Standard, 5 Elements				
REICPCAL5I	Ca	500	2-5% HNO ₃	100ml
	Fe	500		
	K	500		
	Mg	500		
	Na	500		
Multi-Element Verification Standard, 5 Elements				
REICPVER5A	Be	10	2-5% HNO ₃	100ml
	Co	10		
	In	10		
	Ti	10		
	U	10		
Multi-Element Calibration Standard, 5 Elements				
REICPCAL5J	Ca	1000	2-5% HNO ₃	100ml
	Fe	1000		
	Li	1000		
	Tl	1000		
	Y	1000		
Multi-Element Tuning Standard, 5 Elements				
REICPTUNE5A	Ce	10	2-5% HNO ₃	100ml
	Co	10		
	Li	10		
	Tl	10		
	Y	10		
Multi-Element Calibration Standard, 5 Elements				
REICPCAL5K	Al	1000	2-5% HNO ₃	100ml
	Cd	500		
	Pb	1000		
	Se	1000		
	Tl	1000		
Multi-Element Calibration Standard, 5 Elements				
REICPCAL5L	As	500	2-5% HNO ₃	100ml
	Cd	250		
	Pb	500		
	Se	500		
	Tl	500		
Multi-Element Calibration Standard, 5 Elements				
REICPCAL5N	As	100	2-5% HNO ₃	100ml
	Cd	50		
	Pb	30		
	Se	50		
	Tl	100		

Product No.	Elements	Conc µg/ml	Matrix	Pack size
Multi-Element Calibration Standard, 5 Elements according to Test Method 200.7				
REICPCAL5O	K	2000	2-5% HNO ₃	100ml
	Li	500		
	Mo	1000		
	Na	1000		
	Ti	1000		
Multi-Element Calibration Standard, 5 Elements according to Test Method 200.7				
REICPCAL5P	Al	3000	2-5% HNO ₃	100ml
	Ca	15000		
	Fe	12500		
	Mg	7500		
	Na	2500		
Multi-Element Internal Standard, 5 Elements according to Test Method 200.8				
REICPIS5A	Bi	20	2-5% HNO ₃	100ml
	In	20		
	Sc	20		
	Tb	20		
	Y	20		
Multi-Element Tuning Standard, 5 Elements according to Test Method 200.8				
REICPTUNE5B	Be	10	2-5% HNO ₃	100ml
	Co	10		
	In	10		
	Mg	10		
	Pb	10		
Multi-Element Calibration Standard, 4 Elements				
REICPCAL4A	As	100	2% HNO ₃	100ml
	Cr	100		
	Fe	100		
	Se	100		
Multi-Element Calibration Standard, 4 Elements				
REICPCAL4B	Ca	100	5% HNO ₃	100ml
	Fe	100		
	K	100		
	Na	100		
Multi-Element Tuning Standard, 4 Elements				
REICPTUNE4A	Ce	10	5% HNO ₃	100ml
	Li	10		
	Tl	10		
	Y	10		
Multi-Element Calibration Standard, 4 Elements according to Test Method 200.8				
REICPCAL4N	Ca	1000	2% HNO ₃	100ml
	K	1000		
	Mg	1000		
	Na	1000		
Multi-Element Calibration Standard, 4 Elements according to Test Method 200.8				
REICPCAL4C	Ag	100	5% HNO ₃ , tr. Tart. Acid	100ml
	Ba	100		
	Cu	100		
	Fe	100		

Product No.	Elements	Conc µg/ml	Matrix	Pack size
Multi-Element Calibration Standard, 4 Elements according to Test Method 200.8				
REICPCAL4D	Ca	10000	2% HNO ₃	100ml
	Mg	1000		
	Na	10000		
	P	1000		
Multi-Element Interference Standard, 4 Elements according to Test Method 6010				
REICPINTF4A	Al	5000	20% HCl	100ml
	Ca	5000		
	Fe	2000		
	Mg	5000		
Multi-Element Tuning Standard, 4 Elements according to Test Method 6020				
REICPTUNE4C	Co	10	5% HNO ₃	100ml
	In	10		
	Li	10		
	Ti	10		
Multi-Element Verification Standard, 4 Elements according to Test Method 200.7				
REICPVER4B	As	10	5% HNO ₃	100ml
	Pb	10		
	Se	10		
	Ti	10		
Multi-Element Calibration Standard, 4 Elements				
REICPCAL4E	Ca	500	2% HNO ₃	100ml
	K	100		
	Mg	100		
	Na	500		
Multi-Element Calibration Standard, 4 Elements				
REICPCAL4F	Ba	1000	2-5% HNO ₃	100ml
	Ca	1000		
	Mg	1000		
	Sr	1000		
Multi-Element Calibration Standard, 4 Elements				
REICPCAL4G	Cd	10	2-5% HNO ₃	100ml
	Cu	800		
	Ni	200		
	Pb	500		
Multi-Element Calibration Standard, 4 Elements				
REICPCAL4H	Ca	10000	2-5% HNO ₃	100ml
	K	10000		
	Mg	10000		
	Na	10000		

Product No.	Elements	Conc µg/ml	Matrix	Pack size
Multi-Element Calibration Standard, 4 Elements				
REICPCAL4I	Ca	1000	2-5% HNO ₃	100ml
	K	1000		
	Mg	1000		
	Na	1000		
Multi-Element Calibration Standard, 4 Elements according to Test Method 6010				
REICPCAL4J	Ca	5000	2-5% HNO ₃	100ml
	K	5000		
	Mg	5000		
	Na	5000		
Multi-Element Calibration Standard, 4 Elements				
REICPCAL4K	Mo	100	HNO ₃ tr. HF	100ml
	Sb	100		
	Sn	100		
	Ti	100		
Multi-Element Interference Standard, 4 Elements				
REICPINTF4C	Al	5000	2-5% HNO ₃	100ml
	Ca	5000		
	Fe	2000		
	Mg	5000		
Multi-Element Calibration Standard, 4 Elements according to Test Method 200.7				
REICPCAL4L	Ce	200	2-5% HNO ₃	100ml
	Co	200		
	P	1000		
	V	200		
Multi-Element Calibration Standard, 4 Elements according to Test Method 200.7				
REICPCAL4M	B	500	HNO ₃ , tr. HF	100ml
	Mo	300		
	Si	230		
	Ti	1000		
Multi-Element Calibration Standard, 4 Elements				
REICPCAL4N	Ce	10	2-5% HNO ₃	100ml
	Li	10		
	Tl	10		
	Y	10		
ICP Multi-Element Standard, 4 Elements				
ICP-LX-4-25	Sn	1	7% HCl	250ml
	Au	1		
	Pd	1		
	Rh	1		
Tuning Solution 2, 4 Elements				
REICPTUNE2	Ce	10	2% HNO ₃	100ml
	Li	10		
	Tl	10		
	Y	10		
Multi-Element Interference Standard, 3 Elements according to Test Method 6010				
REICPINTF3A	Ba	50	20% HCl	100ml
	Cr	50		
	V	50		

Product No.	Elements	Conc µg/ml	Matrix	Pack size
Multi-Element Calibration Standard, 3 Elements according to Test Method 200.7				
REICPCAL3A	As	500	2% HNO ₃ , tr. HF	100ml
	Mo	100		
	Si	100		
Multi-Element Calibration Standard, 3 Elements				
REICPCAL3B	Au	100	10% HCl	100ml
	Pd	100		
	Pt	100		
Multi-Element Tuning Standard, 3 Elements				
REICPTUNE3A	Ce	10	1% HNO ₃ ,	100ml
	Co	10	0.5% HCl	
	Li	10		
Multi-Element Calibration Standard, 3 Elements according to Test Method 200.7				
REICPCAL3C	Al	1000	2-5% HNO ₃	100ml
	Cr	500		
	Hg	200		
ICP Multi-Element Standard, 3 Elements				
ICP-PS-325M	Ga	50	5% HNO ₃ ,	250ml
	Ir	10	0.5% HCl	
	Rh	10		
Multi-Element Tuning Standard, 2 Elements according to Test Method 200.7				
REICPTUNE2A	Cu	10	5% HNO ₃	100ml
	Pb	10		
Multi-Element Calibration Standard, 2 Elements according to Test Method 200.8				
REICPCAL2A	Mo	20	HNO ₃ tr. HF	100ml
	Sb	20		
ICP Multi-Element Standard, 2 Elements				
ICP-HR-25	S	100	H ₂ O	500ml
	Si	100		