

Product Specification

Primary Metals Standard, for GFAA/ICP/ICP-MS

Lot Number: SAMPLE

Product Number: RPRIMET

Manufacture Date: N/A

Expiration Date: N/A

This is a multielement solution that was prepared volumetrically to contain the elements and concentrations stated below. The uncertainty associated with the certified values is $\pm 0.5\%$ relative. The concentrations are confirmed by ICP or ICP-MS.

Matrix: 2% Nitric Acid

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Nitric Acid	7697-37-2	Trace Metals
Hydrochloric Acid	7647-01-0	Trace Metals
Hydrofluoric Acid	7664-39-3	Trace Metals
Tartaric Acid	87-69-4	ACS

Test	Specification	Result
Appearance	Colorless liquid	N/A

Analyte	Analysis (ppm)	Solute	CAS#	Grade	NIST SRM#
Antimony (Sb)	99.5-100.5 ppm	Antimony	7440-36-0	High Purity	3102
Arsenic (As)	99.5-100.5 ppm	Arsenic	7440-38-2	High Purity	3103
Barium (Ba)	9.95-10.05 ppm	Barium Nitrate	10022-31-8	High Purity	3104
Beryllium (Be)	9.95-10.05 ppm	Beryllium	7440-41-7	High Purity	3105
Cadmium (Cd)	9.95-10.05 ppm	Cadmium	7440-43-9	High Purity	3108
Calcium (Ca)	99.5-100.5 ppm	Calcium Carbonate	471-34-1	High Purity	3109
Chromium (Cr)	9.95-10.05 ppm	Chromium Nitrate Nonahydrate	7789-02-8	High Purity	3112
Copper (Cu)	9.95-10.05 ppm	Copper	7440-50-8	High Purity	3114
Lead (Pb)	9.95-10.05 ppm	Lead	7439-92-1	High Purity	3128
Nickel (Ni)	9.95-10.05 ppm	Nickel	7440-02-0	High Purity	3136
Selenium (Se)	9.95-10.05 ppm	Selenium	7782-49-2	High Purity	3149
Silicon (Si)	99.5-100.5 ppm	Silicon	7440-21-3	High Purity	3150
Sodium (Na)	99.5-100.5 ppm	Sodium Carbonate	497-19-8	High Purity	3152
Thallium (Tl)	9.95-10.05 ppm	Thallium	7440-28-0	High Purity	3158

This standard is guaranteed to be stable and accurate provided the product is kept tightly capped and stored under normal laboratory conditions. Balances are calibrated using NIST traceable weights whose verification of maintenance and recalibration is documented per inhouse Standard Operating Procedures. Class A glassware is also calibrated and routinely rechecked per inhouse Standard Operating Procedures. Trace metal analyzed acids and Trace Metals Analyzed Water are used in the manufacture of this product. Triple cleaned containers are used in the manufacture of this product.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
RPRIMET-100	100 mL natural LDPE	12 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)

A handwritten signature in black ink that reads "Katie Schnur". The signature is written in a cursive style and is placed on a light yellow rectangular background.

Katie Schnur
Quality Control Manager

This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."