

Product Specification

ICP-MS Calibration Standard 3

Lot Number: SAMPLE

Product Number: RICPMS3

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: 20% Hydrochloric Acid

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Hydrochloric Acid	7647-01-0	Trace Metals
Nitric Acid	7697-37-2	Trace Metals

Test	Specification	Result
Appearance	Light brown/gold liquid	N/A

Analyte	Analysis (ppm)	Solute	CAS#	Grade	NIST SRM#
Rhodium (Rh)	9.95-10.05 ppm	Rhodium (III) Chloride Hydrate	20765-98-4	High Purity	3144
Ruthenium (Ru)	9.95-10.05 ppm	Ruthenium (III) Chloride Hydrate	14898-67-0	High Purity	
Hafnium (Hf)	9.95-10.05 ppm	Hafnium Oxychloride Octahydrate	14456-34-9	High Purity	3122
Iridium (Ir)	9.95-10.05 ppm	Iridium (III) Chloride Trihydrate	13569-57-8	High Purity	
Gold (Au)	9.95-10.05 ppm	Gold	7440-57-5	High Purity	3121
Antimony (Sb)	9.95-10.05 ppm	Antimony	7440-36-0	High Purity	3102
Tin (Sn)	9.95-10.05 ppm	Tin	7440-31-5	High Purity	3161
Platinum (Pt)	9.95-10.05 ppm	Platinum	7440-06-4	High Purity	3140
Palladium (Pd)	9.95-10.05 ppm	Palladium	7440-05-3	High Purity	3138
Tellurium (Te)	9.95-10.05 ppm	Tellurium	13494-80-9	High Purity	3156

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 in-house Standard Operating Procedures. Class A glassware is also calibrated and routinely rechecked per in-house 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)
RICPMS3-100	100 mL natural LDPE	12 months
RICPMS3-1000	1 L natural poly	12 months

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

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

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