

Product Specification

Standard #2 for ICP 3300 Mid

Lot Number: SAMPLE

Product Number: RP33MID0

Manufacture Date: N/A

Expiration Date: N/A

This is a multielement blend solution that was prepared volumetrically to contain the certified values reported. The uncertainty associated with the certified values is 1% relative, which is the sum of the estimated errors due to the purity of the raw material, the volumetric preparation of the solution, and transpiration of the solution through the container wall.

The final solution concentrations are confirmed by AA, 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
Hydrofluoric Acid	7664-39-3	Trace Metals

Test	Specification	Result
Appearance	Colorless to slightly colored liquid	N/A

Analyte	Analysis (ppm)	Solute	CAS#	Grade	NIST SRM#
Aluminum (Al)	99-101 ppm	Aluminum Nitrate Nonahydrate	7784-27-2	High Purity	3101
Manganese (Mn)	99-101 ppm	Manganous Nitrate Tetrahydrate	15710-66-4	High Purity	3132
Phosphorus (P)	99-101 ppm	Ammonium Dihydrogen Phosphate	7722-76-1	High Purity	3139
Silicon (Si)	49.5-50.5 ppm	Ammonium Hexafluorosilicate (IV)	16919-19-0	High Purity	3150
Potassium (K)	99-101 ppm	Potassium Nitrate	7757-79-1	High Purity	3141
Calcium (Ca)	99-101 ppm	Calcium Carbonate	471-34-1	High Purity	3109
Sodium (Na)	99-101 ppm	Sodium Carbonate	497-19-8	High Purity	3152
Chromium (Cr)	9.9-10.1 ppm	Chromium Nitrate Nonahydrate	7789-02-8	High Purity	3112
Zinc (Zn)	49.5-50.5 ppm	Zinc	7440-66-6	High Purity	3168
Copper (Cu)	49.5-50.5 ppm	Copper	7440-50-8	High Purity	3114
Magnesium (Mg)	49.5-50.5 ppm	Magnesium	7439-95-4	High Purity	3131
Iron (Fe)	49.5-50.5 ppm	Iron	7439-89-6	High Purity	3126
Nickel (Ni)	9.9-10.1 ppm	Nickel	7440-02-0	High Purity	3136
Barium (Ba)	4.95-5.05 ppm	Barium Nitrate	10022-31-8	High Purity	3104
Arsenic (As)	4.95-5.05 ppm	Arsenic	7440-38-2	High Purity	3103
Lead (Pb)	4.95-5.05 ppm	Lead	7439-92-1	High Purity	3128

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)
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RP33MID0-1A	1 L natural poly	12 months
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Recommended Storage: 15°C - 30°C (59°F - 86°F)



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