

Product Specification

ICP-MS Blend, 8 Elements at 20 ppm

Lot Number: SAMPLE

Product Number: RICPMS80

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: 3% Nitric Acid

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

| Test | Specification | Result |
|------------|--------------------------------|--------|
| Appearance | Colorless to blue-green liquid | N/A |

| Analyte | Analysis (ppm) | Solute | CAS# | Grade | NIST SRM# |
|----------------|----------------|---------------------------------|------------|-------------|-----------|
| Chromium (Cr) | 19.9-20.1 ppm | Chromium Nitrate Nonahydrate | 7789-02-8 | High Purity | 3112 |
| Barium (Ba) | 19.9-20.1 ppm | Barium Nitrate | 10022-31-8 | High Purity | 3104 |
| Selenium (Se) | 19.9-20.1 ppm | Selenium | 7782-49-2 | High Purity | 3149 |
| Copper (Cu) | 19.9-20.1 ppm | Copper | 7440-50-8 | High Purity | 3114 |
| Silver (Ag) | 19.9-20.1 ppm | Silver | 7440-22-4 | High Purity | 3151 |
| Nickel (Ni) | 19.9-20.1 ppm | Nickel | 7440-02-0 | High Purity | 3136 |
| Manganese (Mn) | 19.9-20.1 ppm | Manganese | 7439-96-5 | High Purity | 3132 |
| Lead (Pb) | 19.9-20.1 ppm | Lead | 7439-92-1 | High Purity | 3128 |

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

| Part Number | Size / Package Type | Shelf Life (Unopened Container) |
|---------------|---------------------|---------------------------------|
| RICPMS80-500B | 500 mL amber 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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