

# Product Specification

## Mixed ICP Standard, Trace

**Lot Number:** SAMPLE

**Product Number:** PMX005N

**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 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:** 5% Nitric Acid/trace HF

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
Ammonium Hydroxide	1336-21-6	Trace Metals

Analyte	Analysis (ppm)	Solute	CAS#	Grade	NIST SRM#
Chromium (Cr)	3.96-4.04 ppm	Chromium Nitrate Nonahydrate	7789-02-8	High Purity	3112
Selenium (Se)	7.92-8.08 ppm	Selenium	7782-49-2	High Purity	3149
Silicon (Si)	59.4-60.6 ppm	Ammonium Hexafluorosilicate (IV)	16919-19-0	High Purity	3150
Molybdenum (Mo)	3.96-4.04 ppm	Molybdenum	7439-98-7	High Purity	3134
Boron (B)	11.88-12.12 ppm	Boric Acid	10043-35-3	High Purity	3107
Vanadium (V)	0.396-0.404 ppm	Vanadium	7440-62-2	High Purity	3165
Tin (Sn)	0.396-0.404 ppm	Tin	7440-31-5	High Purity	3161
Nickel (Ni)	0.198-0.202 ppm	Nickel	7440-02-0	High Purity	3136

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)
PMX005N-500	500 mL 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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