

# Certificate of Analysis

## Matrix Modifier, 0.2% Pd (2000 ppm Pd)

Lot Number: 4401G34

Product Number: MMPD2KN

Manufacture Date: JAN 09, 2024

Expiration Date: DEC 2025

Palladium concentration is certified traceable to NIST Standard Reference Material 3138. Nickel is a common contaminant of Palladium and may be present with other trace metals, which total 50 ppb or less. These very low levels will not interfere with the performance of this Matrix Modifier.

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
Palladium	7440-05-3	High Purity

Test	Specification	Result	NIST SRM#
Appearance	Brown liquid	Passed	
Palladium (Pd)	1990-2010 ppm	2000 ppm	3138

Specification	Reference
Matrix Modifier, 0.2% Pd (2000 ppm Pd) Pd in 5% HNO <sub>3</sub>	EPA (200.9)

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)
MMPD2KN-50	50 mL natural poly	24 months

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

Paul Brandon (01/09/2024)

Production Manager

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

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