

# Certificate of Analysis

**Nitrate Nitrogen Standard, 1000 ppm N (4427 ppm NO<sub>3</sub>)****Lot Number:** 4404G53**Product Number:** 5459**Manufacture Date:** APR 12, 2024**Expiration Date:** SEP 2025

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is based upon the volumetric method of preparation.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Potassium Nitrate	7757-79-1	High Purity
Chloroform	67-66-3	

Test	Specification	Result
Appearance	Colorless liquid	Passed
Nitrogen (N)	995-1005 ppm	1000 ppm

Specification	Reference
Nitrate Solution, Stock (1.0 mL = 1.0 mg NO <sub>3</sub> -N)	ASTM (D 3867 A)
Nitrate Solution, Stock (1.0 mL = 1.0 mg NO <sub>3</sub> -N)	ASTM (D 3867 B)
Stock Nitrate Solution: 1 mL = 1.0 mg NO <sub>3</sub> -N	EPA (353.2)
Stock Nitrate Solution: 1.0 mL = 1.00 mg NO <sub>3</sub> -N	EPA (353.3)

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)
5459-16	500 mL natural poly	18 months
5459-4	120 mL natural poly	18 months

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

Paul Brandon (04/12/2024)

Production Manager

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

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